

Chemical Analysis Report

SW-DIST-2016-04-12-01

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

Event Description: **SCI_w/ACID**
Request ID: **RQ-2016-04-11-35**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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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: G4SW0044

Collection Date/Time: 04/11/2016 11:25

Field ID: G4SW0044

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1788668	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P302125	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P302457	
		Sulfate	2.0		mg SO4/L	P302458	
	SM 2120 B	Color (true)	270		PCU	P302073	
	SM 2320 B-97	Total Alkalinity	62	A	mg CaCO3/L	P302424	
	SM 2540 C-97	TDS	145		mg/L	P302839	
	SM 2540 D-97	TSS	2	I	mg/L	P302826	
	SM 4500 F-C-97	Fluoride	0.097	I	mg F/L	P302427	
1788670	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P302652	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P302853	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.082		mg N/L	P302539	
	EPA 365.1 Rev. 2.0	Total-P	0.079		mg P/L	P302574	
	SM 5310 B-00	Organic Carbon	28		mg C/L	P302648	
1788672	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.049		mg P/L	P302109	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: G4SW0099

Collection Date/Time: 04/11/2016 14:00

Field ID: G4SW0099

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1788669	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P302125	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P302457	
		Sulfate	0.20	U	mg SO4/L	P302458	
	SM 2120 B	Color (true)	540		PCU	P302073	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P302424	
	SM 2540 C-97	TDS	130		mg/L	P302839	
	SM 2540 D-97	TSS	2	U	mg/L	P302826	
	SM 4500 F-C-97	Fluoride	0.080	I	mg F/L	P302427	
1788671	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P302652	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P302853	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P302539	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P302574	
	SM 5310 B-00	Organic Carbon	54		mg C/L	P302648	
1788673	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P302109	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P302125

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: P302457

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P302458

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302652

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302853

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302539

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302574

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302109

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

Reference Method: SM 2120 B
Batch ID: P302073

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P302424

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: P302839

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302826

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P302427

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P302648

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: P302457

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P302458

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302652

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302853

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.1		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302539

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302574

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302109

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

Reference Method: SM 2320 B-97
Batch ID: P302424

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P302427

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.6		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P302648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P302457

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788790	Chloride	100		P	90 - 110
1788791	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P302458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788790	Sulfate	99.3		P	90 - 110
1788791	Sulfate	99.7		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P302652

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788670	Ammonia-N	100	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P302853

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788635	Kjeldahl Nitrogen	108	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P302539

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788644	NO2NO3-N	97.9	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P302574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788670	Total-P	98.8	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P302109

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788721	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Batch ID: P302427

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788668	Fluoride	97.6	97.6	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P302648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1788670	Organic Carbon	99.7		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P302125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788248	Turbidity	3.80	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P302457

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788790	Chloride	0.0851	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P302458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788790	Sulfate	1.01	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302652

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788670	Ammonia-N	1.46	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302853

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788635	Kjeldahl Nitrogen	5.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788644	NO2NO3-N	0.402	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788670	Total-P	2.54	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788721	O-Phosphate-P	0.543	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P302073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788557	Color (true)	0.421	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P302424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788668	Total Alkalinity	0.0639	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P302839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788605	TDS	2.90	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P302427

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788668	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P302648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1788670	Organic Carbon	0.282	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: A68822
Included Lab Sample IDs: 1788668, 1788669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A68831
Included Lab Sample IDs: 1788672, 1788673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	98.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A68840
Included Lab Sample IDs: 1788668, 1788669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.0	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A68927

Included Lab Sample IDs: 1788668, 1788669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	99.7	P/P	90 - 110
Total Alkalinity	99.7	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A68927

Included Lab Sample IDs: 1788668, 1788669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	100	P/P	90 - 110
Fluoride	98.5	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A68939

Included Lab Sample IDs: 1788668, 1788669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	101	P/P	90 - 110
Sulfate	101	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A68976

Included Lab Sample IDs: 1788670, 1788671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.0	97.5	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A68999

Included Lab Sample IDs: 1788670, 1788671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.7	96.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A69001

Included Lab Sample IDs: 1788670, 1788671

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69058

Included Lab Sample IDs: 1788670

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69063

Included Lab Sample IDs: 1788671

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69109

Included Lab Sample IDs: 1788670, 1788671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	99.2	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				3.80	
EPA 300.0 Rev. 2.1	Chloride	101	100 101		0.0851	
	Sulfate	99.9	99.3 99.7		1.01	
EPA 350.1 Rev. 2.0	Ammonia-N	98.9	100 103			1.46
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1	108 98.1			5.10
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	97.9 98.4			0.402
EPA 365.1 Rev. 2.0	Total-P	97.7	98.8 95.8			2.54
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	101 102			0.543
SM 2120 B	Color (true)				0.421	
SM 2320 B-97	Total Alkalinity	103			0.0639	
SM 2540 C-97	TDS				2.90	
SM 4500 F-C-97	Fluoride	97.6	97.6 97.6			0.0
SM 5310 B-00	Organic Carbon	93.2	99.7			0.282

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1788668, 1788669
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1788668, 1788669
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1788668, 1788669
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1788670, 1788671
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1788670, 1788671
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1788670, 1788671
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1788670, 1788671
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1788672, 1788673

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
SM 2120 B / E31780	True Color measured at 450 nm	1788668, 1788669
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1788668, 1788669
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1788668, 1788669
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1788668, 1788669
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1788668, 1788669
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1788670, 1788671

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	04/12/2016			04/12/2016 15:22	Sima Feizi	1788668, 1788669
EPA 300.0 Rev. 2.1	04/12/2016			04/19/2016	Julia Storbeck	1788668, 1788669
EPA 350.1 Rev. 2.0	04/12/2016			04/20/2016	Diana M. Turner	1788670, 1788671
EPA 351.2 Rev. 2.0	04/12/2016	04/25/2016	Sofia Elnemr	04/26/2016	Christopher Armour	1788670, 1788671
EPA 353.2 Rev. 2.0	04/12/2016			04/19/2016	Virginia P. Brown	1788670, 1788671
EPA 365.1 Rev. 2.0	04/12/2016	04/20/2016	Christopher Armour	04/20/2016	Lipi Saha	1788670
	04/12/2016	04/20/2016	Christopher Armour	04/21/2016	Lipi Saha	1788671
EPA 365.1 Rev. 2.0 dissolved	04/12/2016			04/12/2016 15:46	Julia Storbeck	1788672
	04/12/2016			04/12/2016 15:47	Julia Storbeck	1788673
SM 2120 B	04/12/2016			04/12/2016 14:23	Rochelle Y Jackson	1788668
	04/12/2016			04/12/2016 14:24	Rochelle Y Jackson	1788669
SM 2320 B-97	04/12/2016			04/16/2016	Dale L. Simmons	1788668, 1788669
SM 2540 C-97	04/12/2016			04/15/2016	Yijie Li	1788668, 1788669
SM 2540 D-97	04/12/2016			04/15/2016	Yijie Li	1788668, 1788669
SM 4500 F-C-97	04/12/2016			04/16/2016	Dale L. Simmons	1788668, 1788669
SM 5310 B-00	04/12/2016			04/20/2016	Sofia Elnemr	1788670, 1788671