Chemical Analysis Report

CEN-DIST-2019-05-31-01

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

Event Description: **Belle / Gordon / Van**
Request ID: **RQ-2019-05-27-24**
Customer: **CEN-DIST**
Project ID: **SMP**

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Date Certified: 13-JUN-2019 10:45

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 by the Florida Department of Health Environmental Laboratory Certification Program 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: LAKE GORDON @ CENTER **Collection Date/Time: 05/30/2019 11:15**

Field ID: G3CE0020 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2090318	EPA 180.1 Rev. 2.0	Turbidity	0.35		NTU	P364834	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P365163	
		Sulfate	5.8		mg SO4/L	P365164	
	SM 2120 B	Color (true)	12		PCU	P364844	
	SM 2320 B-97	Total Alkalinity	47		mg CaCO3/L	P365401	RPD
	SM 2540 C-97	TDS	83		mg/L	P365176	
	SM 2540 D-97	TSS	2	U	mg/L	P364981	
	SM 4500 F-C-97	Fluoride	0.087	I	mg F/L	P365404	
2090320	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P364917	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P365089	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P364893	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P365187	
	SM 5310 B-00	Organic Carbon	4.3		mg C/L	P364950	
2090322	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P364852	

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: LAKE VAN @ SW CORNER OF W LOBE **Collection Date/Time: 05/30/2019 10:15**

Field ID: G4CE0099 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2090319	EPA 180.1 Rev. 2.0	Turbidity	4.5		NTU	P364834	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P365163	
		Sulfate	27		mg SO4/L	P365164	
	SM 2120 B	Color (true)	75		PCU	P364844	
	SM 2320 B-97	Total Alkalinity	17		mg CaCO3/L	P365401	RPD
	SM 2540 C-97	TDS	144		mg/L	P365176	
	SM 2540 D-97	TSS	3	I	mg/L	P364981	
	SM 4500 F-C-97	Fluoride	0.32		mg F/L	P365404	
2090321	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P364917	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P365089	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P364893	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P365187	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P364950	
2090323	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P364852	

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: P364834

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365163

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365164

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364917

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365089

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364893

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365187

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364852

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

Reference Method: SM 2120 B
Batch ID: P364844

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P365401

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

Reference Method: SM 2540 C-97
Batch ID: P365176

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P364981

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P365404

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P364950

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: P365163

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365164

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364917

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365089

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364893

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365187

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364852

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

Reference Method: SM 2120 B
Batch ID: P364844

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.7		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P365401

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P365404

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.4		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P364950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	104		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365163

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090181	Chloride	96.6		P	90 - 110
2090334	Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090181	Sulfate	95.6		P	90 - 110
2090334	Sulfate	99.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090320	Ammonia-N	103	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090339	Kjeldahl Nitrogen	106	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364893

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090320	NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090339	Total-P	95.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090223	O-Phosphate-P	95.4	95.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P365404

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090335	Fluoride	96.1	96.6	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P364950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090338	Organic Carbon	102	102	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P364834

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090295	Turbidity	2.01	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090181	Chloride	0.869	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090181	Sulfate	0.971	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090320	Ammonia-N	2.77	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090339	Kjeldahl Nitrogen	0.407	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364893

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090320	NO2NO3-N	1.00	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090339	Total-P	5.53	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090223	O-Phosphate-P	0.418	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B
Batch ID: P364844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090218	Color (true)	3.15	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P365401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090335	Total Alkalinity	4.94	Sample	F	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P365176

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090334	TDS	1.01	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P365404

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090335	Fluoride	0.482	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P364950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090338	Organic Carbon	0.0311	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 180.1 Rev. 2.0
Run ID: A91791
Included Lab Sample IDs: 2090318, 2090319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	98.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A91794
Included Lab Sample IDs: 2090318, 2090319

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: A91796
Included Lab Sample IDs: 2090322, 2090323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.7	97.5	P/P	90 - 110
O-Phosphate-P	97.5	97.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A91809
Included Lab Sample IDs: 2090320, 2090321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	97.5	97.0	P/P	90 - 110
NO2NO3-N	97.5	97.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A91814
Included Lab Sample IDs: 2090320, 2090321

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

Reference Method: SM 5310 B-00
Run ID: A91835
Included Lab Sample IDs: 2090320, 2090321

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A91854
Included Lab Sample IDs: 2090318, 2090319

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A91923
Included Lab Sample IDs: 2090320, 2090321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.5	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A91960
Included Lab Sample IDs: 2090321

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A91989
Included Lab Sample IDs: 2090320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	98.2	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A92009
Included Lab Sample IDs: 2090318, 2090319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	105	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A92009
Included Lab Sample IDs: 2090318, 2090319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.1	99.0	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					2.01	
EPA 300.0 Rev. 2.1	Chloride	98.2	96.6	99.2		0.869	
	Sulfate	98.6	95.6	99.5		0.971	
EPA 350.1 Rev. 2.0	Ammonia-N	101	103	106			2.77
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	106	105			0.407
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0	99.5	100			1.00
EPA 365.1 Rev. 2.0	Total-P	100	95.8	101			5.53
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.3	95.4	95.8			0.418
SM 2120 B	Color (true)	99.7				3.15	
SM 2320 B-97	Total Alkalinity	104				4.94	
SM 2540 C-97	TDS					1.01	
SM 4500 F-C-97	Fluoride	97.4	96.1	96.6			0.482
SM 5310 B-00	Organic Carbon	104	102	102			0.0311

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2090318, 2090319
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2090318, 2090319
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2090318, 2090319
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2090320, 2090321
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2090320, 2090321
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2090320, 2090321
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2090320, 2090321
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2090322, 2090323
SM 2120 B / E31780	True Color measured at 450 nm	2090318, 2090319
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2090318, 2090319
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2090318, 2090319
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2090318, 2090319
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2090318, 2090319
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2090320, 2090321

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	05/31/2019			05/31/2019 16:22	Julia Storbeck	2090318, 2090319
EPA 300.0 Rev. 2.1	05/31/2019			06/05/2019 17:29	Lipi Saha	2090318
	05/31/2019			06/05/2019 17:41	Lipi Saha	2090319
EPA 350.1 Rev. 2.0	05/31/2019			05/31/2019 15:18	Ping Hua	2090320
	05/31/2019			05/31/2019 15:38	Ping Hua	2090321
EPA 351.2 Rev. 2.0	05/31/2019	06/05/2019 16:30	Adrian Shelby	06/06/2019 14:07	Joseph Suarez	2090320
	05/31/2019	06/05/2019 16:30	Adrian Shelby	06/06/2019 14:09	Joseph Suarez	2090321
EPA 353.2 Rev. 2.0	05/31/2019			06/03/2019 10:52	Beverly Y. Sanders	2090320
	05/31/2019			06/03/2019 10:59	Beverly Y. Sanders	2090321
EPA 365.1 Rev. 2.0	05/31/2019	06/06/2019 12:35	Sima Feizi	06/07/2019 14:26	Lipi Saha	2090321
	05/31/2019	06/06/2019 12:35	Sima Feizi	06/10/2019 16:05	Julia Storbeck	2090320
EPA 365.1 Rev. 2.0 dissolved	05/31/2019			05/31/2019 15:43	Jhamieka S. Greenwood	2090322
	05/31/2019			05/31/2019 15:49	Jhamieka S. Greenwood	2090323
SM 2120 B	05/31/2019			05/31/2019 16:06	Madeline Funaro	2090318, 2090319
SM 2320 B-97	05/31/2019			06/11/2019 07:22	Dale L. Simmons	2090318
	05/31/2019			06/11/2019 07:33	Dale L. Simmons	2090319
SM 2540 C-97	05/31/2019			06/03/2019 15:26	Mariam Hanna	2090318, 2090319
SM 2540 D-97	05/31/2019			06/03/2019 15:47	Mariam Hanna	2090318, 2090319
SM 4500 F-C-97	05/31/2019			06/11/2019 07:22	Dale L. Simmons	2090318
	05/31/2019			06/11/2019 07:33	Dale L. Simmons	2090319
SM 5310 B-00	05/31/2019			06/04/2019 00:18	Madeline Funaro	2090320
	05/31/2019			06/04/2019 00:30	Madeline Funaro	2090321