Chemical Analysis Report

CEN-DIST-2020-08-21-01

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

Event Description: **Three Forks/Little Sawgrass**
Request ID: **RQ-2020-08-17-62**
Customer: **CEN-DIST**
Project ID: **SMP**

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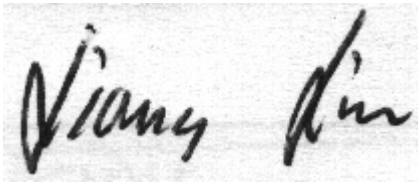
Date Certified: 10-SEP-2020 16:00



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: Sjr At Inlet To Little Lake Sawgrass **Collection Date/Time: 08/20/2020 12:15**

Field ID: G3CE0017 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191652	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P386411	
	EPA 300.0 Rev. 2.1	Chloride	54		mg Cl/L	P386939	
		Sulfate	6.3		mg SO4/L	P386941	
	SM 2120 B-2011	Color (true)	360		PCU	P386418	
	SM 2320 B-2011	Total Alkalinity	57		mg CaCO3/L	P386492	
	SM 2540 C-2011	TDS	237		mg/L	P386800	
	SM 2540 D-2011	TSS	4	I	mg/L	P386795	
	SM 4500 F-C-2011	Fluoride	0.13		mg F/L	P386498	
2191653	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P386444	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P386607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P386507	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P386469	
	SM 5310 B-2011	Organic Carbon	35		mg C/L	P386549	
2191654	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.098		mg P/L	P386425	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Sjr Upstream Of Lake Hellen Blazes **Collection Date/Time: 08/20/2020 11:44**

Field ID: G3CE0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191649	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P386411	
	EPA 300.0 Rev. 2.1	Chloride	76		mg Cl/L	P386939	
		Sulfate	9.1		mg SO4/L	P386941	
	SM 2120 B-2011	Color (true)	320		PCU	P386418	
	SM 2320 B-2011	Total Alkalinity	75		mg CaCO3/L	P386492	
	SM 2540 C-2011	TDS	291		mg/L	P386800	
	SM 2540 D-2011	TSS	7	I	mg/L	P386795	
	SM 4500 F-C-2011	Fluoride	0.19		mg F/L	P386498	
2191650	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P386444	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.2		mg N/L	P386607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P386507	
	EPA 365.1 Rev. 2.0	Total-P	0.084		mg P/L	P386469	
	SM 5310 B-2011	Organic Carbon	37		mg C/L	P386549	
2191651	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.038		mg P/L	P386425	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: 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: P386411

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386607

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

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

Reference Method: SM 2120 B-2011
Batch ID: P386418

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P386492

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

Reference Method: SM 2540 C-2011
Batch ID: P386800

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P386795

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P386549

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: P386939

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386607

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

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

Reference Method: SM 2120 B-2011
Batch ID: P386418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.6		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P386492

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P386549

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191533	Chloride	96.8		P	90 - 110
2191617	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191533	Sulfate	96.7		P	90 - 110
2191617	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191694	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191639	NO2NO3-N	93.8	94.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191592	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191593	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191848	Fluoride	100	98.4	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P386549

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191508	Organic Carbon	97.1		P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191637	Turbidity	1.21	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386939

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191533	Chloride	0.202	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191533	Sulfate	0.0611	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191694	Ammonia-N	0.783	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386607

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191631	Kjeldahl Nitrogen	3.45	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191639	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191592	Total-P	0.547	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191593	O-Phosphate-P	0.884	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B-2011
Batch ID: P386418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191693	Color (true)	3.25	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P386492

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191848	Total Alkalinity	1.45	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P386800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2190978	TDS	2.17	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P386498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191848	Fluoride	1.42	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P386549

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191508	Organic Carbon	0.455	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A100543
Included Lab Sample IDs: 2191649, 2191652

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A100591
Included Lab Sample IDs: 2191649, 2191652

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

Reference Method: SM 2120 B-2011
Run ID: A100594
Included Lab Sample IDs: 2191649, 2191652

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115
Color (true)	98.5	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A100595
Included Lab Sample IDs: 2191651, 2191654

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A100600
Included Lab Sample IDs: 2191650, 2191653

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

Reference Method: SM 2320 B-2011
Run ID: A100627
Included Lab Sample IDs: 2191649, 2191652

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.1	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A100627
Included Lab Sample IDs: 2191649, 2191652

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A100631
Included Lab Sample IDs: 2191650, 2191653

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: A100645
Included Lab Sample IDs: 2191650, 2191653

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

Reference Method: SM 5310 B-2011
Run ID: A100654
Included Lab Sample IDs: 2191650, 2191653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.5	95.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A100700
Included Lab Sample IDs: 2191650, 2191653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	96.2	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		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					1.21	
EPA 300.0 Rev. 2.1	Chloride	98.9	96.8	100		0.202	
	Sulfate	98.1	96.7	100		0.0611	
EPA 350.1 Rev. 2.0	Ammonia-N	95.4	102	103			0.783
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102					3.45
EPA 353.2 Rev. 2.0	NO2NO3-N	100	93.8	94.3			0.506
EPA 365.1 Rev. 2.0	Total-P	105	105	105			0.547
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	101	102			0.884
SM 2120 B-2011	Color (true)	97.6				3.25	
SM 2320 B-2011	Total Alkalinity	101				1.45	
SM 2540 C-2011	TDS					2.17	
SM 4500 F-C-2011	Fluoride	100	100	98.4			1.42
SM 5310 B-2011	Organic Carbon	99.2	97.1				0.455

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2191649, 2191652
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2191649, 2191652
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2191649, 2191652
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2191650, 2191653
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2191650, 2191653
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2191650, 2191653
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2191650, 2191653
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2191651, 2191654
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2191649, 2191652
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2191649, 2191652
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2191649, 2191652
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2191649, 2191652
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2191649, 2191652
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2191650, 2191653

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	08/21/2020			08/21/2020 14:31	Yen Ta	2191649, 2191652
EPA 300.0 Rev. 2.1	08/21/2020			08/21/2020 21:05	Julia Storbeck	2191649
	08/21/2020			08/21/2020 21:17	Julia Storbeck	2191652
EPA 350.1 Rev. 2.0	08/21/2020			08/23/2020 19:59	Ping Hua	2191650
	08/21/2020			08/23/2020 20:01	Ping Hua	2191653
EPA 351.2 Rev. 2.0	08/21/2020	08/27/2020 09:15	Sima Feizi	08/28/2020 09:25	Virginia P. Brown	2191650
	08/21/2020	08/27/2020 09:15	Sima Feizi	08/28/2020 09:27	Virginia P. Brown	2191653
EPA 353.2 Rev. 2.0	08/21/2020			08/25/2020 08:44	Beverly Y. Sanders	2191650
	08/21/2020			08/25/2020 08:45	Beverly Y. Sanders	2191653
EPA 365.1 Rev. 2.0	08/21/2020	08/24/2020 12:04	Yen Ta	08/25/2020 14:30	Benjamin T. Nordmann	2191650
	08/21/2020	08/24/2020 12:04	Yen Ta	08/25/2020 14:31	Benjamin T. Nordmann	2191653
EPA 365.1 Rev. 2.0 dissolved	08/21/2020			08/21/2020 15:12	Virginia P. Brown	2191651
	08/21/2020			08/21/2020 15:17	Virginia P. Brown	2191654
SM 2120 B-2011	08/21/2020			08/21/2020 15:53	Benjamin T. Nordmann	2191649
	08/21/2020			08/21/2020 16:00	Benjamin T. Nordmann	2191652
SM 2320 B-2011	08/21/2020			08/24/2020 18:03	Dale L. Simmons	2191649
	08/21/2020			08/24/2020 18:16	Dale L. Simmons	2191652
SM 2540 C-2011	08/21/2020			08/24/2020 13:35	Yijie Li	2191649, 2191652
SM 2540 D-2011	08/21/2020			08/24/2020 13:35	Yijie Li	2191649, 2191652
SM 4500 F-C-2011	08/21/2020			08/24/2020 18:03	Dale L. Simmons	2191649
	08/21/2020			08/24/2020 18:16	Dale L. Simmons	2191652
SM 5310 B-2011	08/21/2020			08/26/2020 03:42	Lauren Lees	2191650
	08/21/2020			08/26/2020 03:54	Lauren Lees	2191653