

Chemical Analysis Report

SO-DIST-2020-03-18-01

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

Event Description: **2020 SMP : Marco Island**
Request ID: **RQ-2020-03-16-49**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Nicole Reistad

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 09-APR-2020 09:30

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first few letters of the first name.

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: 8063 @ MouthofGordonPass

Collection Date/Time: 03/17/2020 12:20

Field ID: G1SD0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2165957	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P380991	
	EPA 300.0 Rev. 2.1	Bromide	71		mg Br/L	P381200	
	SM 2320 B-2011	Total Alkalinity	126		mg CaCO3/L	P381065	
	SM 2540 D-2011	TSS	3	I	mg/L	P381575	
	SM 4500 F-C-2011	Fluoride	1.3		mg F/L	P381452	
2165959	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P381056	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23	I	mg N/L	P381137	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381249	
	EPA 365.1 Rev. 2.0	Total-P	0.021		mg P/L	P381277	
	SM 5310 B-2011	Organic Carbon	2.1		mg C/L	P381024	
2165961	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P380887	

Sample Location: 8063 @ MouthofGordonPass

Collection Date/Time: 03/17/2020 12:15

Field ID: G1SD0060_DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2165958	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P380991	
	EPA 300.0 Rev. 2.1	Bromide	71		mg Br/L	P381200	
	SM 2320 B-2011	Total Alkalinity	126		mg CaCO3/L	P381065	
	SM 2540 D-2011	TSS	3	U	mg/L	P381575	
	SM 4500 F-C-2011	Fluoride	1.3		mg F/L	P381452	
2165960	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P381056	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	I	mg N/L	P381276	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381310	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P381277	
	SM 5310 B-2011	Organic Carbon	2.0		mg C/L	P381024	
2165962	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P380887	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P380991

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381200

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381056

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381137

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381276

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381249

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381310

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381277

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380887

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P381065

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

Reference Method: SM 2540 D-2011
Batch ID: P381575

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P381452

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P381024

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: P381200

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381056

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381137

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381276

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381249

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381310

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: P381277

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: P380887

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

Reference Method: SM 2320 B-2011
Batch ID: P381065

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-2011
Batch ID: P381452

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	92 - 104

Reference Method: SM 5310 B-2011
Batch ID: P381024

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166022	Bromide	100	101	P/P	90 - 110
2166911	Bromide	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381056

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165959	Ammonia-N	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381137

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165959	Kjeldahl Nitrogen	100	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381276

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166851	Kjeldahl Nitrogen	96.5	94.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381249

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165959	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2163548	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165803	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380887

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165939	O-Phosphate-P	98.4	98.6	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P381452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165407	Fluoride	98.4	101	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P381024

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166017	Organic Carbon	95.7	96.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P380991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166372	Turbidity	2.06	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166022	Bromide	0.551	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165959	Ammonia-N	0.811	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165959	Kjeldahl Nitrogen	3.30	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381276

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166851	Kjeldahl Nitrogen	1.59	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165959	NO2NO3-N	0.489	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2163548	NO2NO3-N	0.411	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165803	Total-P	1.48	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P380887

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165939	O-Phosphate-P	0.189	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P381065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165407	Total Alkalinity	0.325	Sample	P	0 - 2.8

Reference Method: SM 2540 D-2011
 Batch ID: P381575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165726	TSS	5.71	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P381452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165407	Fluoride	1.47	Spike	P	0 - 2.0

Reference Method: SM 5310 B-2011
 Batch ID: P381024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166017	Organic Carbon	0.638	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A98278

Included Lab Sample IDs: 2165961, 2165962

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A98314

Included Lab Sample IDs: 2165957, 2165958

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	98.5	P/P	95 - 105

Reference Method: SM 5310 B-2011

Run ID: A98330

Included Lab Sample IDs: 2165959, 2165960

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	91.4	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A98342

Included Lab Sample IDs: 2165959, 2165960

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

Reference Method: SM 2320 B-2011

Run ID: A98350

Included Lab Sample IDs: 2165957, 2165958

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A98393

Included Lab Sample IDs: 2165959

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.4	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A98406

Included Lab Sample IDs: 2165957, 2165958

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98425

Included Lab Sample IDs: 2165959

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98444

Included Lab Sample IDs: 2165960

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A98451

Included Lab Sample IDs: 2165960

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.9	95.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A98495

Included Lab Sample IDs: 2165957, 2165958

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	99.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A98544

Included Lab Sample IDs: 2165959, 2165960

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	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 SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					2.06	
EPA 300.0 Rev. 2.1	Bromide	104	100	101	100		0.551
EPA 350.1 Rev. 2.0	Ammonia-N	100	103	104			0.811
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.9	100	104			3.30
	Kjeldahl Nitrogen	98.7	96.5	94.8			1.59
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.489
	NO2NO3-N	100	100	101			0.411
EPA 365.1 Rev. 2.0	Total-P	106	105	103			1.48
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.9	98.4	98.6			0.189
SM 2320 B-2011	Total Alkalinity	104				0.325	
SM 2540 D-2011	TSS					5.71	
SM 4500 F-C-2011	Fluoride	98.3	98.4	101			1.47
SM 5310 B-2011	Organic Carbon	98.8	95.7	96.4			0.638

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2165957, 2165958
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2165957, 2165958
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2165959, 2165960
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2165959, 2165960
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2165959, 2165960
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2165959, 2165960
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2165961, 2165962
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2165957, 2165958
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2165957, 2165958
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2165957, 2165958
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2165959, 2165960

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	03/18/2020			03/18/2020 16:33	Yen Ta	2165957, 2165958
EPA 300.0 Rev. 2.1	03/18/2020			03/24/2020 02:02	Elliott Rodriguez	2165957
	03/18/2020			03/24/2020 02:19	Elliott Rodriguez	2165958
EPA 350.1 Rev. 2.0	03/18/2020			03/21/2020 15:43	Ping Hua	2165959
	03/18/2020			03/21/2020 15:48	Ping Hua	2165960
EPA 351.2 Rev. 2.0	03/18/2020	03/23/2020 12:20	Sima Feizi	03/24/2020 10:06	Jhamieka S. Greenwood	2165959
	03/18/2020	03/25/2020 09:45	Sima Feizi	03/26/2020 09:33	Jhamieka S. Greenwood	2165960
EPA 353.2 Rev. 2.0	03/18/2020			03/25/2020 10:19	Beverly Y. Sanders	2165959
	03/18/2020			03/26/2020 08:54	Beverly Y. Sanders	2165960
EPA 365.1 Rev. 2.0	03/18/2020	03/25/2020 14:20	Lipi Saha	03/30/2020 17:37	Benjamin T. Nordmann	2165959
	03/18/2020	03/25/2020 14:20	Lipi Saha	03/30/2020 17:38	Benjamin T. Nordmann	2165960
EPA 365.1 Rev. 2.0 dissolved	03/18/2020			03/18/2020 14:00	Carlos Miranda	2165961
	03/18/2020			03/18/2020 14:01	Carlos Miranda	2165962
SM 2320 B-2011	03/18/2020			03/20/2020 20:10	Dale L. Simmons	2165957
	03/18/2020			03/20/2020 20:20	Dale L. Simmons	2165958
SM 2540 D-2011	03/18/2020			03/20/2020 15:21	Yijie Li	2165957, 2165958
SM 4500 F-C-2011	03/18/2020			03/27/2020 15:55	Dale L. Simmons	2165957
	03/18/2020			03/27/2020 16:01	Dale L. Simmons	2165958
SM 5310 B-2011	03/18/2020			03/20/2020 05:38	Lauren Lees	2165959
	03/18/2020			03/20/2020 06:02	Lauren Lees	2165960