

Chemical Analysis Report

NE-DIST-2020-03-24-01

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

Event Description: **Vilano Boat**
Request ID: **RQ-2020-03-23-13**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
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Date Certified: 10-APR-2020 09:09



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: St. Augustine Inlet SE of Vilano Bt. Rmp.

Collection Date/Time: 03/23/2020 11:45

Field ID: G5NE0587

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2167402	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P381226	
	EPA 300.0 Rev. 2.1	Bromide	65		mg Br/L	P381517	
	SM 2320 B-2011	Total Alkalinity	116		mg CaCO3/L	P381659	
	SM 2540 D-2011	TSS	4	I	mg/L	P381584	
	SM 4500 F-C-2011	Fluoride	1.2		mg F/L	P381452	
2167403	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P381428	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	I	mg N/L	P381381	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381391	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P381355	
	SM 5310 B-2011	Organic Carbon	1.9	I	mg C/L	P381324	
2167404	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P381242	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: XIMANIES CREEK @ 1ST SE BEND

Collection Date/Time: 03/23/2020 11:10

Field ID: 27010053

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2167396	EPA 180.1 Rev. 2.0	Turbidity	4.5		NTU	P381225	
	EPA 300.0 Rev. 2.1	Bromide	65		mg Br/L	P381517	
	SM 2320 B-2011	Total Alkalinity	118		mg CaCO3/L	P381659	
	SM 2540 D-2011	TSS	6	I	mg/L	P381584	
	SM 4500 F-C-2011	Fluoride	1.2		mg F/L	P381452	
2167398	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P381428	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34	I	mg N/L	P381381	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381391	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P381355	
	SM 5310 B-2011	Organic Carbon	2.7		mg C/L	P381324	
2167400	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P381242	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: SOMBRERO CREEK 50M BELOW FORK

Collection Date/Time: 03/23/2020 10:20

Field ID: 27010054

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2167397	EPA 180.1 Rev. 2.0	Turbidity	4.1	A	NTU	P381226	
	EPA 300.0 Rev. 2.1	Bromide	64		mg Br/L	P381517	
	SM 2320 B-2011	Total Alkalinity	116		mg CaCO3/L	P381659	
	SM 2540 D-2011	TSS	7	IA	mg/L	P381584	
	SM 4500 F-C-2011	Fluoride	1.2		mg F/L	P381452	
2167399	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P381428	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	I	mg N/L	P381381	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381391	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P381355	
	SM 5310 B-2011	Organic Carbon	2.2		mg C/L	P381324	
2167401	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P381242	

Ref. Method and Comment:

SM 2540 D-2011: 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: P381225

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P381226

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381517

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381428

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381381

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381391

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: P381355

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P381242

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

Reference Method: SM 2320 B-2011
Batch ID: P381659

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P381584

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: P381324

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: P381517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381428

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: P381381

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381391

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381355

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: P381242

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

Reference Method: SM 2320 B-2011
Batch ID: P381659

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

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: P381324

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167411	Bromide	99.0	98.8	P/P	90 - 110
2167589	Bromide	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167403	Ammonia-N	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167399	Kjeldahl Nitrogen	109	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381391

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167249	NO2NO3-N	97.4	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381355

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167075	Total-P	99.1	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P381242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167400	O-Phosphate-P	99.3	99.0	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

Reference Method: SM 5310 B-2011
Batch ID: P381324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167398	Organic Carbon	97.2	97.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P381225

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167348	Turbidity	2.13	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P381226

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167397	Turbidity	9.59	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167411	Bromide	0.124	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167403	Ammonia-N	2.09	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167399	Kjeldahl Nitrogen	4.52	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381391

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167249	NO2NO3-N	1.39	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381355

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167075	Total-P	0.629	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P381242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167400	O-Phosphate-P	0.270	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P381659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2168652	Total Alkalinity	0.299	Sample	P	0 - 3.3

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: P381324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167398	Organic Carbon	0.0	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: A98406

Included Lab Sample IDs: 2167396, 2167397, 2167402

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	99.8	P/P	90 - 110
Bromide	99.8	99.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A98409

Included Lab Sample IDs: 2167396, 2167397, 2167402

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.5	P/P	95 - 105
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A98420

Included Lab Sample IDs: 2167400, 2167401, 2167404

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.6	97.7	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A98452

Included Lab Sample IDs: 2167398, 2167399, 2167403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98485

Included Lab Sample IDs: 2167398, 2167399, 2167403

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A98491

Included Lab Sample IDs: 2167398, 2167399, 2167403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	102	P/P	90 - 110
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	103	100	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A98495

Included Lab Sample IDs: 2167396, 2167397, 2167402

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A98506

Included Lab Sample IDs: 2167398, 2167399, 2167403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.6	98.5	P/P	90 - 110
Kjeldahl Nitrogen	98.6	97.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A98581

Included Lab Sample IDs: 2167396, 2167397, 2167402

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	101	P/P	90 - 110
Total Alkalinity	99.8	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A98608

Included Lab Sample IDs: 2167398, 2167399, 2167403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	98.5	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					2.13	
	Turbidity					9.59	
EPA 300.0 Rev. 2.1	Bromide	96.4	99.0	98.8	98.6		0.124
EPA 350.1 Rev. 2.0	Ammonia-N	100	103	101			2.09
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	109	103			4.52
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	97.4	98.8			1.39
EPA 365.1 Rev. 2.0	Total-P	105	99.1	98.4			0.629
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	99.3	99.0			0.270
SM 2320 B-2011	Total Alkalinity	101				0.299	
SM 4500 F-C-2011	Fluoride	98.3	98.4	101			1.47
SM 5310 B-2011	Organic Carbon	103	97.2	97.2			0.0

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2167396, 2167397, 2167402
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2167396, 2167397, 2167402
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2167398, 2167399, 2167403
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2167398, 2167399, 2167403
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2167398, 2167399, 2167403
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2167398, 2167399, 2167403
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2167400, 2167401, 2167404
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2167396, 2167397, 2167402
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2167396, 2167397, 2167402
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2167396, 2167397, 2167402
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2167398, 2167399, 2167403

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	03/24/2020			03/24/2020 14:50	Yen Ta	2167396, 2167397, 2167402
EPA 300.0 Rev. 2.1	03/24/2020			03/27/2020 14:12	Elliott Rodriguez	2167396
	03/24/2020			03/27/2020 14:30	Elliott Rodriguez	2167397
	03/24/2020			03/27/2020 15:21	Elliott Rodriguez	2167402
EPA 350.1 Rev. 2.0	03/24/2020			03/28/2020 13:45	Ping Hua	2167399
	03/24/2020			03/28/2020 15:29	Ping Hua	2167403
	03/24/2020			03/28/2020 15:44	Ping Hua	2167398
EPA 351.2 Rev. 2.0	03/24/2020	03/27/2020 09:45	Sima Feizi	03/30/2020 08:44	Jhamieka S. Greenwood	2167399
	03/24/2020	03/27/2020 09:45	Sima Feizi	03/30/2020 08:54	Jhamieka S. Greenwood	2167398
	03/24/2020	03/27/2020 09:45	Sima Feizi	03/30/2020 08:59	Jhamieka S. Greenwood	2167403
EPA 353.2 Rev. 2.0	03/24/2020			03/27/2020 12:01	Beverly Y. Sanders	2167398
	03/24/2020			03/27/2020 12:03	Beverly Y. Sanders	2167399
	03/24/2020			03/27/2020 12:04	Beverly Y. Sanders	2167403
EPA 365.1 Rev. 2.0	03/24/2020	03/26/2020 17:15	Yen Ta	04/01/2020 18:20	Benjamin T. Nordmann	2167398
	03/24/2020	03/26/2020 17:15	Yen Ta	04/01/2020 18:21	Benjamin T. Nordmann	2167399
	03/24/2020	03/26/2020 17:15	Yen Ta	04/01/2020 18:22	Benjamin T. Nordmann	2167403
EPA 365.1 Rev. 2.0 dissolved	03/24/2020			03/25/2020 09:39	Samantha Davila	2167400
	03/24/2020			03/25/2020 09:42	Samantha Davila	2167401
	03/24/2020			03/25/2020 09:43	Samantha Davila	2167404
SM 2320 B-2011	03/24/2020			04/01/2020 12:24	Dale L. Simmons	2167396
	03/24/2020			04/01/2020 13:07	Dale L. Simmons	2167397
	03/24/2020			04/01/2020 13:17	Dale L. Simmons	2167402
SM 2540 D-2011	03/24/2020			03/25/2020 15:32	Yijie Li	2167396, 2167397, 2167402
SM 4500 F-C-2011	03/24/2020			03/27/2020 17:16	Dale L. Simmons	2167396
	03/24/2020			03/27/2020 17:21	Dale L. Simmons	2167397
	03/24/2020			03/27/2020 17:27	Dale L. Simmons	2167402
SM 5310 B-2011	03/24/2020			03/25/2020 23:42	Lauren Lees	2167398
	03/24/2020			03/26/2020 00:25	Lauren Lees	2167399
	03/24/2020			03/26/2020 00:39	Lauren Lees	2167403