Chemical Analysis Report

WQAP-2017-03-22-04

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

Event Description: **RUN 1**
Request ID: **RQ-2017-03-20-44**
Customer: **WQAP**
Project ID: **SMP**

Send Reports to:
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13051 N. Telecom Parkway
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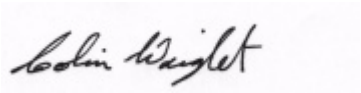
Certified by: Colin Wright, Program Administrator

Date Certified: 14-APR-2017 11:02



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: GOM North **Collection Date/Time: 03/21/2017 11:10**

Field ID: G5SW0120 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1882033	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P322008	
	SM 2320 B-97	Total Alkalinity	170		mg CaCO3/L	P322241	
	SM 2540 D-97	TSS	3	U	mg/L	P322629	
	SM 4500 F-C-97	Fluoride	0.62		mg F/L	P322245	
1882037	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P321986	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P322020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.018		mg N/L	P322372	
	EPA 365.1 Rev. 2.0	Total-P	0.008	I	mg P/L	P322026	
	SM 5310 B-00	Organic Carbon	4.5		mg C/L	P322060	
1882041	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P322002	

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: Pith **Collection Date/Time: 03/21/2017 12:50**

Field ID: G5SW0029 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1882034	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P322008	
	SM 2320 B-97	Total Alkalinity	171		mg CaCO3/L	P322241	
	SM 2540 D-97	TSS	3	U	mg/L	P322629	
	SM 4500 F-C-97	Fluoride	0.63		mg F/L	P322245	
1882038	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P321986	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P322020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P322372	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P322026	
	SM 5310 B-00	Organic Carbon	5.3		mg C/L	P322060	
1882042	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P322002	

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: GOM SE **Collection Date/Time: 03/21/2017 13:20**

Field ID: G5SW0061 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1882035	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P322008	
	SM 2320 B-97	Total Alkalinity	169		mg CaCO3/L	P322241	
	SM 2540 D-97	TSS	3	U	mg/L	P322629	
	SM 4500 F-C-97	Fluoride	0.68		mg F/L	P322245	
1882039	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P321986	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P322020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P322372	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P322026	
	SM 5310 B-00	Organic Carbon	5.2		mg C/L	P322060	
1882043	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P322002	

Field ID: G5SW0061 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

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: Anclote Bayou **Collection Date/Time: 03/21/2017 15:10**

Field ID: G5SW0078 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1882036	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P322008	
	SM 2320 B-97	Total Alkalinity	139		mg CaCO3/L	P322241	
	SM 2540 D-97	TSS	3	U	mg/L	P322629	
	SM 4500 F-C-97	Fluoride	0.87		mg F/L	P322245	
1882040	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P321986	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P322020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P322372	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P322026	
	SM 5310 B-00	Organic Carbon	4.8		mg C/L	P322060	
1882044	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P322002	

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: P322008

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321986

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322020

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322372

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322026

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322002

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

Reference Method: SM 2320 B-97
Batch ID: P322241

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

Reference Method: SM 2540 D-97
Batch ID: P322629

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P322245

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P322060

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321986

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: P322020

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322372

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322026

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322026

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322002

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	90.5		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P322241

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P322245

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P322060

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 350.1 Rev. 2.0
Batch ID: P321986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1882037	Ammonia-N	104	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1882040	Kjeldahl Nitrogen	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322372

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1882015	NO2NO3-N	103	92.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1882016	Total-P	96.2	95.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1882041	O-Phosphate-P	96.6	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P322245

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1882599	Fluoride	95.6	97.6	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P322060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1881812	Organic Carbon	97.9	98.3	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P322008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1881984	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882037	Ammonia-N	1.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P322020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882040	Kjeldahl Nitrogen	1.12	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P322372

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882015	NO2NO3-N	10.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P322026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882016	Total-P	0.364	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P322002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882041	O-Phosphate-P	2.45	Spike	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P322241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882599	Total Alkalinity	0.432	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97
Batch ID: P322245

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1882599	Fluoride	1.42	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P322060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1881812	Organic Carbon	0.368	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 350.1 Rev. 2.0
Run ID: A75279
Included Lab Sample IDs: 1882037, 1882038, 1882039, 1882040

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A75284
Included Lab Sample IDs: 1882041, 1882042, 1882043, 1882044

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	99.8	P/P	90 - 110
O-Phosphate-P	99.4	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A75286
Included Lab Sample IDs: 1882033, 1882034, 1882035, 1882036

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

Reference Method: SM 5310 B-00
Run ID: A75305
Included Lab Sample IDs: 1882037, 1882038, 1882039, 1882040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	92.8	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A75331
Included Lab Sample IDs: 1882037, 1882038, 1882039, 1882040

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A75352
Included Lab Sample IDs: 1882037, 1882038, 1882039, 1882040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	96.1	P/P	90 - 110
Kjeldahl Nitrogen	101	108	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A75378
Included Lab Sample IDs: 1882033, 1882034, 1882035, 1882036

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	105	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A75378
Included Lab Sample IDs: 1882033, 1882034, 1882035, 1882036

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.0	97.2	P/P	90 - 110
Fluoride	97.2	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A75429
Included Lab Sample IDs: 1882037, 1882038, 1882039, 1882040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	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		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					0.0	
EPA 350.1 Rev. 2.0	Ammonia-N	101	104	102			1.62
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	102	101			1.12
EPA 353.2 Rev. 2.0	NO2NO3-N	102	103	92.5			10.0
EPA 365.1 Rev. 2.0	Total-P	104	96.2	95.9			0.364
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	90.5	96.6	99.0			2.45
SM 2320 B-97	Total Alkalinity	104				0.432	
SM 4500 F-C-97	Fluoride	94.3	95.6	97.6			1.42
SM 5310 B-00	Organic Carbon	99.2	97.9	98.3			0.368

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1882033, 1882034, 1882035, 1882036
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1882037, 1882038, 1882039, 1882040
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1882037, 1882038, 1882039, 1882040
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1882037, 1882038, 1882039, 1882040
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1882037, 1882038, 1882039, 1882040
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1882041, 1882042, 1882043, 1882044
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1882033, 1882034, 1882035, 1882036
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1882033, 1882034, 1882035, 1882036
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1882033, 1882034, 1882035, 1882036
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1882037, 1882038, 1882039, 1882040

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	03/22/2017			03/22/2017 16:01	Blanca Fach	1882033, 1882034, 1882035, 1882036
EPA 350.1 Rev. 2.0	03/22/2017			03/22/2017	Julie Michelle Frank	1882037, 1882038, 1882039, 1882040
EPA 351.2 Rev. 2.0	03/22/2017	03/23/2017	Adrian Shelby	03/24/2017	Joseph Suarez	1882037, 1882038, 1882039, 1882040
EPA 353.2 Rev. 2.0	03/22/2017			03/29/2017	Beverly Y. Sanders	1882037, 1882038, 1882039, 1882040
EPA 365.1 Rev. 2.0	03/22/2017	03/23/2017	Adrian Shelby	03/24/2017	Lipi Saha	1882037, 1882038, 1882039, 1882040
EPA 365.1 Rev. 2.0 dissolved	03/22/2017			03/22/2017 14:19	Anthony C. Onicha	1882041
	03/22/2017			03/22/2017 14:55	Anthony C. Onicha	1882042
	03/22/2017			03/22/2017 14:56	Anthony C. Onicha	1882043
	03/22/2017			03/22/2017 14:57	Anthony C. Onicha	1882044
SM 2320 B-97	03/22/2017			03/25/2017	Dale L. Simmons	1882033, 1882034, 1882035, 1882036
SM 2540 D-97	03/22/2017			03/24/2017	Yijie Li	1882033, 1882034, 1882035, 1882036
SM 4500 F-C-97	03/22/2017			03/25/2017	Dale L. Simmons	1882033, 1882034, 1882035, 1882036
SM 5310 B-00	03/22/2017			03/23/2017	Julie Michelle Frank	1882037, 1882038, 1882039, 1882040