

Chemical Analysis Report

TLH-ROC-2017-11-28-02

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

Event Description: **SMP Freshwater Kit A**
Request ID: **RQ-2017-10-30-54**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Michael Eckles

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Certified by: Colin Wright, Program Administrator

Date Certified: 18-DEC-2017 11:14

A handwritten signature in black ink, appearing to read "Colin Wright", is written on a light-colored rectangular background.

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: Eightmile Creek @ NW 798 St

Collection Date/Time: 11/28/2017 11:35

Field ID: G1TLHR0078-2017-06

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1948924	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P335986	
	EPA 300.0 Rev. 2.1	Chloride	9.1		mg Cl/L	P336187	
	SM 2120 B	Color (true)	190		PCU	P335992	
	SM 2320 B-97	Total Alkalinity	121		mg CaCO3/L	P336464	
	SM 2540 C-97	TDS	227		mg/L	P336391	
	SM 2540 D-97	TSS	2	I	mg/L	P336365	
	SM 4500 F-C-97	Fluoride	0.056	I	mg F/L	P336468	
1948926	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P336792	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P336352	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P336163	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P336282	
	SM 5310 B-00	Organic Carbon	27		mg C/L	P336200	
1948928	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P336028	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Ten Mile Pond

Collection Date/Time: 11/28/2017 13:23

Field ID: G1TLHR0023-2017-05

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1948925	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P335986	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P336187	
	SM 2120 B	Color (true)	41	A	PCU	P335993	
	SM 2320 B-97	Total Alkalinity	1.5	I	mg CaCO3/L	P336464	
	SM 2540 C-97	TDS	43		mg/L	P336391	
	SM 2540 D-97	TSS	3	I	mg/L	P336365	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P336468	
1948927	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P336792	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.90		mg N/L	P336352	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P336163	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P336282	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P336200	
1948929	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P336028	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: 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: P335986

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336187

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336792

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336352

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P336163

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: P336282

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336028

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

Reference Method: SM 2120 B
Batch ID: P335992

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P335993

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P336464

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P336391

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P336365

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P336468

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P336200

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: P336187

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336792

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336352

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: P336163

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P336282

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P336282

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336028

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

Reference Method: SM 2320 B-97
Batch ID: P336464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P336468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P336200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1949100	Chloride	96.6		P	90 - 110
1949149	Chloride	96.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336792

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1948879	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336352

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1948927	Kjeldahl Nitrogen	100	106	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P336163

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1948742	NO2NO3-N	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1948964	O-Phosphate-P	98.3	99.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P336468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1948737	Fluoride	97.4	97.4	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P336200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1948670	Organic Carbon	96.0	97.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P335986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948878	Turbidity	1.75	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1949149	Chloride	0.995	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948879	Ammonia-N	0.568	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948927	Kjeldahl Nitrogen	3.28	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P336163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948742	NO2NO3-N	0.241	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P336282

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948764	Total-P	0.649	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P336028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948964	O-Phosphate-P	1.13	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P335992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948757	Color (true)	0.671	Sample	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P335993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948925	Color (true)	2.03	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P336464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948737	Total Alkalinity	0.381	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
 Batch ID: P336391

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948878	TDS	2.31	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P336468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948737	Fluoride	0.0	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P336200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1948670	Organic Carbon	0.572	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: A80557
Included Lab Sample IDs: 1948924, 1948925

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

Reference Method: SM 2120 B
Run ID: A80558
Included Lab Sample IDs: 1948924, 1948925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.1	P/P	85 - 115
Color (true)	101	100	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A80571
Included Lab Sample IDs: 1948928, 1948929

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A80623
Included Lab Sample IDs: 1948926, 1948927

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A80632
Included Lab Sample IDs: 1948924, 1948925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.9	101	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A80635
Included Lab Sample IDs: 1948926, 1948927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	98.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A80732

Included Lab Sample IDs: 1948924, 1948925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A80732

Included Lab Sample IDs: 1948924, 1948925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80744

Included Lab Sample IDs: 1948926, 1948927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80764

Included Lab Sample IDs: 1948926, 1948927

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80825

Included Lab Sample IDs: 1948926, 1948927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	102	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				1.75	
EPA 300.0 Rev. 2.1	Chloride	97.1	96.0 96.6		0.995	
EPA 350.1 Rev. 2.0	Ammonia-N	103	100 101			0.568
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	100 106			3.28
EPA 353.2 Rev. 2.0	NO2NO3-N	104	103			0.241
EPA 365.1 Rev. 2.0	Total-P	102				0.649
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	98.3 99.5			1.13
SM 2120 B	Color (true)				0.671	
	Color (true)				2.03	
SM 2320 B-97	Total Alkalinity	103			0.381	
SM 2540 C-97	TDS				2.31	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 4500 F-C-97	Fluoride	96.3	97.4	97.4		0.0
SM 5310 B-00	Organic Carbon	99.8	96.0	97.0		0.572

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1948924, 1948925
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1948924, 1948925
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1948926, 1948927
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1948926, 1948927
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1948926, 1948927
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1948926, 1948927
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1948928, 1948929
SM 2120 B / E31780	True Color measured at 450 nm	1948924, 1948925
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1948924, 1948925
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1948924, 1948925
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1948924, 1948925
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1948924, 1948925
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1948926, 1948927

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	11/28/2017			11/28/2017 15:59	DeAsia Armster	1948924, 1948925
EPA 300.0 Rev. 2.1	11/28/2017			12/01/2017	Irina Carbone	1948924, 1948925
EPA 350.1 Rev. 2.0	11/28/2017			12/08/2017	Sofia Elnemr	1948926, 1948927
EPA 351.2 Rev. 2.0	11/28/2017	12/05/2017	Adrian Shelby	12/06/2017	Joseph Suarez	1948926, 1948927
EPA 353.2 Rev. 2.0	11/28/2017			12/01/2017	Beverly Y. Sanders	1948926, 1948927
EPA 365.1 Rev. 2.0	11/28/2017	12/04/2017	Sima Feizi	12/07/2017	Lipi Saha	1948926, 1948927
EPA 365.1 Rev. 2.0 dissolved	11/28/2017			11/28/2017 16:49	Megan Treadwell	1948928
	11/28/2017			11/28/2017 16:50	Megan Treadwell	1948929
SM 2120 B	11/28/2017			11/28/2017 16:08	Tanya Welborn	1948925
	11/28/2017			11/28/2017 16:20	Tanya Welborn	1948924
SM 2320 B-97	11/28/2017			12/06/2017	Dale L. Simmons	1948924, 1948925
SM 2540 C-97	11/28/2017			12/01/2017	Yijie Li	1948924, 1948925
SM 2540 D-97	11/28/2017			12/01/2017	Yijie Li	1948924, 1948925
SM 4500 F-C-97	11/28/2017			12/06/2017	Dale L. Simmons	1948924, 1948925
SM 5310 B-00	11/28/2017			12/01/2017	Ping Hua	1948926, 1948927