

Chemical Analysis Report

NW-DIST-2021-04-14-01

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

Event Description: **Bayou Chico BMAP**
Request ID: **RQ-2021-04-12-25**
Customer: **NW-DIST**
Project ID: **BMAP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 05-MAY-2021 11:40

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored 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 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: Bayou Chico at Navy Blvd Bridge

Collection Date/Time: 04/13/2021 14:40

Field ID: 3302JE20

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2239596	EPA 180.1 Rev. 2.0	Turbidity	3.2	A	NTU	P396563	
2239599	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P397018	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37		mg N/L	P396977	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.72		mg N/L	P396841	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P396699	

Sample Location: Bayou Chico at W St. Bridge

Collection Date/Time: 04/13/2021 15:05

Field ID: 33020JF1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2239597	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P396563	
2239600	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P397018	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.36		mg N/L	P396977	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.99		mg N/L	P396841	
	EPA 365.1 Rev. 2.0	Total-P	0.061		mg P/L	P396695	

Sample Location: Pensacola Bay at Sanders Beach

Collection Date/Time: 04/13/2021 10:55

Field ID: 33020J10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2239604	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P396563	
2239605	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P397020	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25	I	mg N/L	P397063	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.050		mg N/L	P397045	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P396855	

Sample Location: Bayou Chico at Mandalay Drive

Collection Date/Time: 04/13/2021 11:30

Field ID: 33020JD4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2239598	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P396563	
2239601	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P397021	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P396977	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.48		mg N/L	P396841	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P396699	

Sample Location: Jackson Creek at New Warrington Road

Collection Date/Time: 04/13/2021 12:30

Field ID: 33020222

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2239602	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P396563	
2239603	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P397021	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	I	mg N/L	P396971	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.1		mg N/L	P396841	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P396699	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P396563

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397018

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397020

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397021

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396971

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396977

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P397063

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P396841

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: P397045

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396695

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396699

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396855

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397018

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397021

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396971

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: P396977

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P397063

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P396841

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P397045

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396695

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396699

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396855

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239599	Ammonia-N	94.8	95.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239606	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397021

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239603	Ammonia-N	97.4	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396971

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239535	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396977

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239599	Kjeldahl Nitrogen	106	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P397063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239605	Kjeldahl Nitrogen	101	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P396841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239474	NO2NO3-N	98.1	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P397045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239605	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396695

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239408	Total-P	103	101	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396699

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239599	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396855

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239560	Total-P	99.3	103	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P396563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239596	Turbidity	11.0	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239599	Ammonia-N	0.168	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239606	Ammonia-N	1.09	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239603	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396971

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239535	Kjeldahl Nitrogen	0.564	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P396977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239599	Kjeldahl Nitrogen	2.92	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P397063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239605	Kjeldahl Nitrogen	5.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P396841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239474	NO2NO3-N	4.68	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P397045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239605	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396695

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239408	Total-P	1.15	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396699

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239599	Total-P	1.69	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239560	Total-P	3.50	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A104732

Included Lab Sample IDs: 2239596, 2239597, 2239598, 2239602, 2239604

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A104810

Included Lab Sample IDs: 2239600

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A104820

Included Lab Sample IDs: 2239599, 2239601, 2239603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A104844

Included Lab Sample IDs: 2239599, 2239600, 2239601, 2239603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.0	P/P	90 - 110
NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A104883

Included Lab Sample IDs: 2239605

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A104919

Included Lab Sample IDs: 2239599, 2239600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.2	98.0	P/P	90 - 110
Ammonia-N	99.1	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A104920

Included Lab Sample IDs: 2239601, 2239603, 2239605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.4	97.2	P/P	90 - 110
Ammonia-N	99.2	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A104928

Included Lab Sample IDs: 2239605

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A104951

Included Lab Sample IDs: 2239599, 2239600, 2239601, 2239603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	98.4	P/P	90 - 110
Kjeldahl Nitrogen	96.9	94.3	P/P	90 - 110
Kjeldahl Nitrogen	98.4	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A104990

Included Lab Sample IDs: 2239605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	90.1	95.8	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					11.0	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4	94.8	95.0			0.168
	Ammonia-N	99.4	100	102			1.09
	Ammonia-N	98.8	97.4	97.4			0.0
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.9	106	107			0.564
	Kjeldahl Nitrogen	100	106	102			2.92
	Kjeldahl Nitrogen	101	101	95.5			5.49
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	98.1	105			4.68
	NO2NO3-N	101	100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	105	103	101			1.15
	Total-P	101	103	101			1.69
	Total-P	104	99.3	103			3.50

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2239596, 2239597, 2239598, 2239602, 2239604
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2239599, 2239600, 2239601, 2239603, 2239605
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2239599, 2239600, 2239601, 2239603, 2239605
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2239599, 2239600, 2239601, 2239603, 2239605
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2239599, 2239600, 2239601, 2239603, 2239605

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	04/14/2021			04/14/2021 15:46	Yen Ta	2239596, 2239597, 2239598, 2239602, 2239604
EPA 350.1 Rev. 2.0	04/14/2021			04/22/2021 16:55	Ping Hua	2239600
	04/14/2021			04/22/2021 17:43	Ping Hua	2239599
	04/14/2021			04/22/2021 18:09	Ping Hua	2239605
	04/14/2021			04/22/2021 18:29	Ping Hua	2239603
	04/14/2021			04/22/2021 18:33	Ping Hua	2239601
EPA 351.2 Rev. 2.0	04/14/2021	04/22/2021 13:13	Benjamin T. Nordmann	04/23/2021 17:52	Virginia P. Brown	2239603
	04/14/2021	04/22/2021 14:21	Benjamin T. Nordmann	04/23/2021 16:28	Virginia P. Brown	2239599
	04/14/2021	04/22/2021 14:21	Benjamin T. Nordmann	04/23/2021 16:36	Virginia P. Brown	2239600
	04/14/2021	04/22/2021 14:21	Benjamin T. Nordmann	04/23/2021 16:38	Virginia P. Brown	2239601
	04/14/2021	04/23/2021 13:54	Benjamin T. Nordmann	04/26/2021 13:59	Virginia P. Brown	2239605
EPA 353.2 Rev. 2.0	04/14/2021			04/19/2021 14:49	Touraj Touran	2239599
	04/14/2021			04/19/2021 16:10	Touraj Touran	2239600
	04/14/2021			04/19/2021 16:11	Touraj Touran	2239601
	04/14/2021			04/19/2021 16:13	Touraj Touran	2239603
	04/14/2021			04/23/2021 08:57	Beverly Y. Sanders	2239605
EPA 365.1 Rev. 2.0	04/14/2021	04/16/2021 13:47	Yen Ta	04/16/2021 17:23	Shengyu Ding	2239600
	04/14/2021	04/16/2021 13:47	Yen Ta	04/19/2021 11:37	Shengyu Ding	2239599, 2239601
	04/14/2021	04/16/2021 13:47	Yen Ta	04/19/2021 11:38	Shengyu Ding	2239603
	04/14/2021	04/20/2021 14:25	Yen Ta	04/21/2021 13:06	Shengyu Ding	2239605