

Chemical Analysis Report

NW-DIST-2021-12-14-01

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

Event Description: **Project GreenShores Quarterly Sampling**

Request ID: **RQ-2021-12-13-03**

Customer: **NW-DIST**

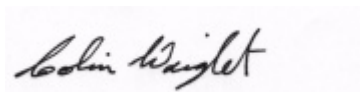
Project ID: **DISTRICT**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Miranda Butler

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: Colin Wright, Program Administrator

Date Certified: 10-JAN-2022 10:45



NON-CONFORMANCE REPORT INCLUDED

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: Range marker East of Bayou Texar

Collection Date/Time: 12/13/2021 09:47

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294941	EPA 180.1 Rev. 2.0	Turbidity	1.7	A	NTU	P407432	
	SM 2120 B-2011	Color (true)	3.4	I	PCU	P407438	
	SM 2540 D-2011	TSS	3	U	mg/L	P407766	
2294955	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P407422	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: Midpoint between Bay Bridge and Muscogee Wharf

Collection Date/Time: 12/13/2021 10:06

Field ID: 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294942	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P407432	
	SM 2120 B-2011	Color (true)	3.9	I A	PCU	P407438	
	SM 2540 D-2011	TSS	3	U	mg/L	P407766	
2294956	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I J	mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	I J	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.088		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P407422	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 350.1 Rev. 2.0: Sample integrity may be compromised because of damaged sample container.

EPA 351.2 Rev. 2.0: Sample integrity may be compromised because of damaged sample container.

Sample Location: East end of primary stormdrain

Collection Date/Time: 12/13/2021 10:15

Field ID: 3

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294943	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P407432	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407438	
	SM 2540 D-2011	TSS	7	I	mg/L	P407766	
2294957	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.094		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P407422	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: South of primary stormdrain

Collection Date/Time: 12/13/2021 10:23

Field ID: 4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294944	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P407432	
	SM 2120 B-2011	Color (true)	2.6	I	PCU	P407438	
	SM 2540 D-2011	TSS	3	U	mg/L	P407766	
2294958	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P407422	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: End of Chase Street

Collection Date/Time: 12/13/2021 10:42

Field ID: 5

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294945	EPA 180.1 Rev. 2.0	Turbidity	1.4	A	NTU	P407433	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407439	
	SM 2540 D-2011	TSS	3	U	mg/L	P407766	
2294959	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: Midpoint between Muscogee and Hawkshaw

Collection Date/Time: 12/13/2021 10:50

Field ID: 6

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294946	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P407433	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407439	
	SM 2540 D-2011	TSS	3	U	mg/L	P407766	
2294960	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: Midpoint between bridge and port spoil pond Collection Date/Time: 12/13/2021 10:57

Field ID: 7

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294947	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P407433	
	SM 2120 B-2011	Color (true)	5.5	I	PCU	P407439	
	SM 2540 D-2011	TSS	4	I	mg/L	P407766	
2294961	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.089		mg N/L	P407491	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: West of primary stormdrain

Collection Date/Time: 12/13/2021 10:31

Field ID: 8

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294948	EPA 180.1 Rev. 2.0	Turbidity	0.80		NTU	P407433	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407439	
	SM 2540 D-2011	TSS	3	UA	mg/L	P407766	
2294962	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.094		mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: West of Hawkshaw Lagoon

Collection Date/Time: 12/13/2021 11:37

Field ID: 9

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294949	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P407433	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407439	
	SM 2540 D-2011	TSS	3	U	mg/L	P407767	
2294963	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P408037	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	I	mg N/L	P407965	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.086		mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: South of Bayfront Stormdrain

Collection Date/Time: 12/13/2021 11:27

Field ID: 10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294950	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P407433	
	SM 2120 B-2011	Color (true)	3.3	I	PCU	P407439	
	SM 2540 D-2011	TSS	3	U	mg/L	P407767	
2294964	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P407813	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P407874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.084		mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: Seville Marina Inlet

Collection Date/Time: 12/13/2021 11:17

Field ID: 11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294951	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P407433	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407439	
	SM 2540 D-2011	TSS	6	I	mg/L	P407767	
2294965	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P407813	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P407952	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.087		mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: East of port spoil pond

Collection Date/Time: 12/13/2021 11:07

Field ID: 12

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294952	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P407433	
	SM 2120 B-2011	Color (true)	3.2	I	PCU	P407439	
	SM 2540 D-2011	TSS	6	I	mg/L	P407767	
2294966	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P407813	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P407952	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.088		mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: Hawkshaw Lagoon at Memorial Bridge

Collection Date/Time: 12/13/2021 11:58

Field ID: 13

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294953	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P407433	
	SM 2120 B-2011	Color (true)	4.7	IA	PCU	P407439	
	SM 2540 D-2011	TSS	4	I	mg/L	P407767	
2294967	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P407813	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.29	I	mg N/L	P407952	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P407423	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

**Sample Location: 150ft South of Hawkshaw Lagoon East
 Stormdrain**

Collection Date/Time: 12/13/2021 12:05

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294954	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P407433	
	SM 2120 B-2011	Color (true)	2.7	I	PCU	P407439	
	SM 2540 D-2011	TSS	3	UA	mg/L	P407767	
2294968	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P407813	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P407874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.096		mg N/L	P407596	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P407515	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: FB South of Primary Stormdrain

Collection Date/Time: 12/13/2021 10:25

Field ID: FB-4

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2294969	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P407434	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P407463	
	SM 2540 D-2011	TSS	2	U	mg/L	P407765	
2294970	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P408036	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P407863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P407533	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P407656	

Ref. Method and Comment:

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

Non-Conformance Report

NCR ID: 9177

Event(s)

NW-DIST-2021-12-14-01

Job(s)

TLH-2021-12-14-41

Sample(s)

2294956

Test(s)

NCR Type: CUSTODY

NCR Category: General

Observation: Sample bottle for sample ID 2294956 was dropped on the floor around 08:30 on 12/20/2021. The cap was broken and some sample leaked out.

Resolution: A new cap was placed on the bottle at 08:35 on 12/20/21. Sample integrity is compromised. Affected results will be qualified as appropriate.

Authorized by/Date: Colin Wright 1/10/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407432

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407433

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407434

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407813

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408036

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408037

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407863

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407874

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407952

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407965

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407491

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407533

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407596

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407422

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407423

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407515

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407656

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

Reference Method: SM 2120 B-2011
Batch ID: P407438

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P407439

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B-2011
Batch ID: P407463

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2540 D-2011
Batch ID: P407765

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P407766

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P407767

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407813

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408036

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408037

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: P407863

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407874

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407952

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407965

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407491

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407533

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407596

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407422

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407423

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407515

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	109		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407656

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	108		P	90 - 110

Reference Method: SM 2120 B-2011
Batch ID: P407438

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	90 - 110

Reference Method: SM 2120 B-2011
Batch ID: P407439

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	108		P	90 - 110

Reference Method: SM 2120 B-2011
Batch ID: P407463

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294964	Ammonia-N	95.6	97.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408036

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295158	Ammonia-N	98.2	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294955	Ammonia-N	99.0	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407863

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294036	Kjeldahl Nitrogen	97.9	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294964	Kjeldahl Nitrogen	100	92.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407952

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294965	Kjeldahl Nitrogen	93.1	99.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407965

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294903	Kjeldahl Nitrogen	94.5	94.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407491

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294902	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294828	NO2NO3-N	97.8	98.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407596

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294962	NO2NO3-N	99.8	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294898	Total-P	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294962	Total-P	100	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2294985	Total-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295071	Total-P	107	106	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294941	Turbidity	13.8	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294945	Turbidity	1.38	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294800	Turbidity	3.26	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294964	Ammonia-N	1.68	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295158	Ammonia-N	0.352	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294955	Ammonia-N	1.96	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294036	Kjeldahl Nitrogen	1.73	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294964	Kjeldahl Nitrogen	7.89	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407952

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294965	Kjeldahl Nitrogen	5.66	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294903	Kjeldahl Nitrogen	0.218	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407491

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294902	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294828	NO2NO3-N	0.709	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407596

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294962	NO2NO3-N	0.341	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294898	Total-P	1.53	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294962	Total-P	1.81	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2294985	Total-P	0.813	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295071	Total-P	0.491	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P407463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295064	Color (true)	0.375	Sample	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: A109375

Included Lab Sample IDs: 2294941, 2294942, 2294943, 2294944, 2294945, 2294946, 2294947, 2294948, 2294949, 2294950, 2294951, 2294952, 2294953, 2294954, 2294969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	99.5	100	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A109376

Included Lab Sample IDs: 2294941, 2294942, 2294943, 2294944, 2294945, 2294946, 2294947, 2294948, 2294949, 2294950, 2294951, 2294952, 2294953, 2294954

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	105	P/P	85 - 115
Color (true)	105	106	P/P	85 - 115

Reference Method: SM 2120 B-2011

Run ID: A109390

Included Lab Sample IDs: 2294969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.9	99.4	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109399

Included Lab Sample IDs: 2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109420

Included Lab Sample IDs: 2294970

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109429

Included Lab Sample IDs: 2294962, 2294963, 2294964, 2294965, 2294966, 2294967, 2294968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109461

Included Lab Sample IDs: 2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963, 2294964, 2294965, 2294966, 2294967

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109515

Included Lab Sample IDs: 2294968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A109539

Included Lab Sample IDs: 2294964, 2294965, 2294966, 2294967, 2294968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.7	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109542

Included Lab Sample IDs: 2294970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109598

Included Lab Sample IDs: 2294970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.2	90.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109613

Included Lab Sample IDs: 2294964, 2294968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.1	95.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109640

Included Lab Sample IDs: 2294965, 2294966, 2294967

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.0	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A109647

Included Lab Sample IDs: 2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963, 2294970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	97.6	P/P	90 - 110
Ammonia-N	97.6	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109670

Included Lab Sample IDs: 2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	99.4	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109670

Included Lab Sample IDs: 2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	103	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				13.8	
	Turbidity				1.38	
	Turbidity				3.26	
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	95.6 97.4			1.68
	Ammonia-N	99.0	98.2 98.6			0.352
	Ammonia-N	98.8	99.0 101			1.96
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.2	97.9 96.2			1.73
	Kjeldahl Nitrogen	101	100 92.2			7.89
	Kjeldahl Nitrogen	101	93.1 99.3			5.66
	Kjeldahl Nitrogen	93.5	94.5 94.7			0.218
EPA 353.2 Rev. 2.0	NO2NO3-N	100	101 101			0.0
	NO2NO3-N	100	97.8 98.8			0.709
	NO2NO3-N	98.0	99.8 99.4			0.341
EPA 365.1 Rev. 2.0	Total-P	108	102 104			1.53
	Total-P	106	100 98.3			1.81
	Total-P	109	101 102			0.813
	Total-P	108	107 106			0.491
SM 2120 B-2011	Color (true)	103				
	Color (true)	108				
	Color (true)	100			0.375	

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2294941, 2294942, 2294943, 2294944, 2294945, 2294946, 2294947, 2294948, 2294949, 2294950, 2294951, 2294952, 2294953, 2294954, 2294969
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963, 2294964, 2294965, 2294966, 2294967, 2294968, 2294970
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963, 2294964, 2294965, 2294966, 2294967, 2294968, 2294970
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963, 2294964, 2294965, 2294966, 2294967, 2294968, 2294970
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2294955, 2294956, 2294957, 2294958, 2294959, 2294960, 2294961, 2294962, 2294963, 2294964, 2294965, 2294966, 2294967, 2294968, 2294970
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2294941, 2294942, 2294943, 2294944, 2294945, 2294946, 2294947, 2294948, 2294949, 2294950, 2294951, 2294952, 2294953, 2294954, 2294969
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2294941, 2294942, 2294943, 2294944, 2294945, 2294946, 2294947, 2294948, 2294949, 2294950, 2294951, 2294952, 2294953, 2294954, 2294969

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	12/14/2021			12/14/2021 16:32	Khloe J Berg	2294941, 2294942, 2294943, 2294944, 2294945, 2294946, 2294947, 2294948, 2294949, 2294950, 2294951, 2294952, 2294953, 2294954, 2294969
EPA 350.1 Rev. 2.0	12/14/2021			01/03/2022 12:30	Ping Hua	2294970
	12/14/2021			01/03/2022 12:43	Ping Hua	2294955
	12/14/2021			01/03/2022 12:47	Ping Hua	2294956
	12/14/2021			01/03/2022 12:48	Ping Hua	2294957
	12/14/2021			01/03/2022 12:50	Ping Hua	2294958
	12/14/2021			01/03/2022 12:51	Ping Hua	2294959
	12/14/2021			01/03/2022 12:52	Ping Hua	2294960
	12/14/2021			01/03/2022 12:54	Ping Hua	2294961
	12/14/2021			01/03/2022 12:55	Ping Hua	2294962
	12/14/2021			01/03/2022 12:56	Ping Hua	2294963
	12/14/2021			12/22/2021 12:38	Roberta Tatti	2294964
	12/14/2021			12/22/2021 12:42	Roberta Tatti	2294965
	12/14/2021			12/22/2021 12:43	Roberta Tatti	2294966
	12/14/2021			12/22/2021 12:44	Roberta Tatti	2294967
	12/14/2021			12/22/2021 12:46	Roberta Tatti	2294968
EPA 351.2 Rev. 2.0	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:03	Virginia P. Brown	2294955
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:04	Virginia P. Brown	2294956
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:06	Virginia P. Brown	2294957
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:08	Virginia P. Brown	2294958
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:09	Virginia P. Brown	2294959
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:11	Virginia P. Brown	2294960
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:13	Virginia P. Brown	2294961
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:18	Virginia P. Brown	2294962
	12/14/2021	01/04/2022 09:10	Samantha L Bates	01/04/2022 19:19	Virginia P. Brown	2294963
	12/14/2021	12/27/2021 11:02	Samantha L Bates	12/28/2021 16:53	Virginia P. Brown	2294970
	12/14/2021	12/28/2021 02:23	Samantha L Bates	12/29/2021 15:39	Alexandra J Mattheus	2294964
	12/14/2021	12/28/2021 02:23	Samantha L Bates	12/29/2021 15:44	Alexandra J Mattheus	2294968
	12/14/2021	12/29/2021 11:36	Samantha L Bates	01/03/2022 14:32	Alexandra J Mattheus	2294965
	12/14/2021	12/29/2021 11:36	Samantha L Bates	01/03/2022 14:37	Alexandra J Mattheus	2294966
	12/14/2021	12/29/2021 11:36	Samantha L Bates	01/03/2022 14:38	Alexandra J Mattheus	2294967
EPA 353.2 Rev. 2.0	12/14/2021			12/15/2021 13:37	Nathaniel J Jones	2294955
	12/14/2021			12/15/2021 13:38	Nathaniel J Jones	2294956
	12/14/2021			12/15/2021 13:39	Nathaniel J Jones	2294957
	12/14/2021			12/15/2021 13:40	Nathaniel J Jones	2294958
	12/14/2021			12/15/2021 13:42	Nathaniel J Jones	2294959
	12/14/2021			12/15/2021 13:43	Nathaniel J Jones	2294960

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 353.2 Rev. 2.0	12/14/2021			12/15/2021 13:44	Nathaniel J Jones	2294961
	12/14/2021			12/16/2021 09:03	Beverly Y. Sanders	2294970
	12/14/2021			12/16/2021 12:13	Nathaniel J Jones	2294962
	12/14/2021			12/16/2021 12:19	Nathaniel J Jones	2294963
	12/14/2021			12/16/2021 12:20	Nathaniel J Jones	2294964
	12/14/2021			12/16/2021 12:21	Nathaniel J Jones	2294965
	12/14/2021			12/16/2021 12:23	Nathaniel J Jones	2294966
	12/14/2021			12/16/2021 12:24	Nathaniel J Jones	2294967
	12/14/2021			12/16/2021 12:25	Nathaniel J Jones	2294968
	12/14/2021					
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	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:06	Shengyu Ding	2294957
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:07	Shengyu Ding	2294958
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:09	Shengyu Ding	2294962
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:11	Shengyu Ding	2294959
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	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:20	Shengyu Ding	2294961
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:21	Shengyu Ding	2294963
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:22	Shengyu Ding	2294964
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:23	Shengyu Ding	2294965
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:24	Shengyu Ding	2294966
	12/14/2021	12/15/2021 17:30	Simonne.V. Calhoun	12/17/2021 13:25	Shengyu Ding	2294967
	12/14/2021	12/16/2021 12:00	Simonne.V. Calhoun	12/21/2021 14:54	Shengyu Ding	2294968
	12/14/2021	12/21/2021 17:45	Simonne.V. Calhoun	12/22/2021 14:44	Shengyu Ding	2294970
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	12/14/2021			12/14/2021 16:56	Samantha L Bates	2294941
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	12/14/2021			12/14/2021 17:02	Samantha L Bates	2294945, 2294946
	12/14/2021			12/14/2021 17:03	Samantha L Bates	2294947
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	12/14/2021			12/14/2021 17:07	Samantha L Bates	2294954
	12/14/2021			12/14/2021 19:06	Samantha L Bates	2294969
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