

Chemical Analysis Report

NE-DIST-2021-10-21-02

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

Event Description: **Tolomato CM**
Request ID: **RQ-2021-10-04-15**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 15-NOV-2021 09:57

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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 groups are included in this report: Metals and 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: Tolomato River 800 m N of Bridge

Collection Date/Time: 10/20/2021 13:50

Field ID: G5NE0601

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2285364	EPA 180.1 Rev. 2.0	Turbidity	3.5	A	NTU	P405446	
	SM 2320 B-2011	Total Alkalinity	104		mg CaCO3/L	P405522	
	SM 2540 D-2011	TSS	5	I	mg/L	P406101	
	SM 4500 F-C-2011	Fluoride	0.70		mg F/L	P405525	
2285365	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P405856	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P405935	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.024		mg N/L	P405806	
	EPA 365.1 Rev. 2.0	Total-P	0.087		mg P/L	P405508	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P405775	
2285366	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P405417	
2285369	EPA 200.7 Rev. 4.4	Calcium	230		mg/L	P405697	
		Iron	120	I	ug/L	P405697	
		Magnesium	669		mg/L	P405697	
		Manganese	26		ug/L	P405697	
		Zinc	15	U	ug/L	P405697	
	EPA 200.8 Rev. 5.4	Aluminum	163		ug/L	P405697	
		Antimony	0.20	U	ug/L	P405697	
		Arsenic	2.70		ug/L	P405697	
		Beryllium	0.040	U	ug/L	P405697	
		Cadmium	0.080	U	ug/L	P405697	
		Chromium	4.0	U	ug/L	P405697	
		Copper	1.6	U	ug/L	P405697	
		Lead	0.80	U	ug/L	P405697	
		Nickel	2.0	U	ug/L	P405697	
		Selenium	0.80	U	ug/L	P405697	
		Silver	0.040	U	ug/L	P405697	
		Thallium	0.40	U	ug/L	P405697	

Ref. Method and Comment:

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

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium and magnesium 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: P405446

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P405697

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P405697

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405856

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405935

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405806

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405508

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: P405417

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

Reference Method: SM 2320 B-2011
Batch ID: P405522

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

Reference Method: SM 2540 D-2011
Batch ID: P406101

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P405775

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P405697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	101		P	85 - 115
Magnesium	102		P	85 - 115
Manganese	107		P	85 - 115
Zinc	108		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P405697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	107		P	85 - 115
Antimony	108		P	85 - 115
Arsenic	104		P	85 - 115
Beryllium	100		P	85 - 115
Cadmium	104		P	85 - 115
Chromium	102		P	85 - 115
Copper	102		P	85 - 115
Lead	101		P	85 - 115
Nickel	94.8		P	85 - 115
Selenium	102		P	85 - 115
Silver	103		P	85 - 115
Thallium	109		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P405856

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P405935

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P405806

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405508

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405417

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.1		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P405522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P405775

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	105		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P405697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285349	Iron	111	104	P/P	70 - 130
2285349	Manganese	102	100	P/P	70 - 130
2285349	Zinc	101	100	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P405697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285349	Aluminum	111	124	P/P	70 - 130
2285349	Antimony	115	127	P/P	70 - 130
2285349	Arsenic	107	107	P/P	70 - 130
2285349	Beryllium	113	123	P/P	70 - 130
2285349	Cadmium	107	117	P/P	70 - 130
2285349	Chromium	101	120	P/P	70 - 130
2285349	Copper	103	114	P/P	70 - 130
2285349	Lead	113	126	P/P	70 - 130
2285349	Nickel	103	103	P/P	70 - 130
2285349	Selenium	101	112	P/P	70 - 130
2285349	Silver	96.8	105	P/P	70 - 130
2285349	Thallium	112	113	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P405856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285312	Ammonia-N	104	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P405935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285673	Kjeldahl Nitrogen	93.1	94.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P405806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285199	NO2NO3-N	97.6	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405508

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285300	Total-P	101	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285313	O-Phosphate-P	95.8	97.5	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P405525

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2284389	Fluoride	98.9	99.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P405775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2285672	Organic Carbon	102	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P405446

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285364	Turbidity	0.287	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P405697

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285349	Calcium	1.39	Spike	P	0 - 20
2285349	Iron	1.81	Spike	P	0 - 20
2285349	Magnesium	1.94	Spike	P	0 - 20
2285349	Manganese	1.93	Spike	P	0 - 20
2285349	Zinc	0.593	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P405697

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285349	Aluminum	9.26	Spike	P	0 - 20
2285349	Antimony	9.99	Spike	P	0 - 20
2285349	Arsenic	0.0743	Spike	P	0 - 20
2285349	Beryllium	8.73	Spike	P	0 - 20
2285349	Cadmium	9.10	Spike	P	0 - 20
2285349	Chromium	17.2	Spike	P	0 - 20
2285349	Copper	10.3	Spike	P	0 - 20
2285349	Lead	10.3	Spike	P	0 - 20
2285349	Nickel	0.107	Spike	P	0 - 20
2285349	Selenium	9.91	Spike	P	0 - 20
2285349	Silver	8.55	Spike	P	0 - 20
2285349	Thallium	1.27	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P405856

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285312	Ammonia-N	1.42	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P405935

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285673	Kjeldahl Nitrogen	1.21	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P405806

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285199	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405508

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285300	Total-P	2.03	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285313	O-Phosphate-P	1.67	Spike	P	0 - 20

Reference Method: SM 2320 B-2011

Batch ID: P405522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284389	Total Alkalinity	1.02	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011

Batch ID: P405525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2284389	Fluoride	0.480	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011

Batch ID: P405775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2285672	Organic Carbon	0.264	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A108469

Included Lab Sample IDs: 2285366

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.1	98.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A108477

Included Lab Sample IDs: 2285364

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

Reference Method: SM 2320 B-2011

Run ID: A108510

Included Lab Sample IDs: 2285364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	97.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A108510

Included Lab Sample IDs: 2285364

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108531

Included Lab Sample IDs: 2285365

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

Reference Method: SM 5310 B-2011

Run ID: A108622

Included Lab Sample IDs: 2285365

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A108647

Included Lab Sample IDs: 2285365

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A108653

Included Lab Sample IDs: 2285369

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	105	105	P/P	90 - 110
Antimony	104	105	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A108653

Included Lab Sample IDs: 2285369

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	101	99.1	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Chromium	101	95.6	P/P	90 - 110
Copper	101	98.2	P/P	90 - 110
Lead	95.6	96.2	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Silver	99.9	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A108662

Included Lab Sample IDs: 2285365

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.8	97.7	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A108667

Included Lab Sample IDs: 2285369

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A108668

Included Lab Sample IDs: 2285369

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	95.0	94.2	P/P	90 - 110
Nickel	95.6	94.9	P/P	90 - 110
Thallium	98.8	96.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A108702

Included Lab Sample IDs: 2285369

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	104	108	P/P	90 - 110
Iron	101	105	P/P	90 - 110
Manganese	104	106	P/P	90 - 110
Zinc	106	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A108713

Included Lab Sample IDs: 2285365

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	106	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					0.287	
EPA 200.7 Rev. 4.4	Calcium	101					1.39
	Iron	101	111	104			1.81
	Magnesium	102					1.94
	Manganese	107	102	100			1.93
	Zinc	108	101	100			0.593
EPA 200.8 Rev. 5.4	Aluminum	107	111	124			9.26
	Antimony	108	115	127			9.99
	Arsenic	104	107	107			0.0743
	Beryllium	100	113	123			8.73
	Cadmium	104	107	117			9.10
	Chromium	102	101	120			17.2
	Copper	102	103	114			10.3
	Lead	101	113	126			10.3
	Nickel	94.8	103	103			0.107
	Selenium	102	101	112			9.91
	Silver	103	96.8	105			8.55
	Thallium	109	112	113			1.27
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	104	106			1.42
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	93.1	94.9			1.21
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.5	97.6	97.6			0.0
EPA 365.1 Rev. 2.0	Total-P	105	101	98.8			2.03
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1	95.8	97.5			1.67
SM 2320 B-2011	Total Alkalinity	102				1.02	
SM 4500 F-C-2011	Fluoride	100	98.9	99.7			0.480
SM 5310 B-2011	Organic Carbon	105	102	102			0.264

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2285364
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2285369
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2285369
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2285365
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2285365
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2285365
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2285365
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2285366
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2285364
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2285364
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2285364
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2285365

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	10/21/2021			10/21/2021 16:03	Khloe J Berg	2285364
EPA 200.7 Rev. 4.4	10/21/2021	10/28/2021 09:15	Emily M Philpot	11/02/2021 21:31	Josef B Mick	2285369
	10/21/2021	10/28/2021 09:15	Emily M Philpot	11/03/2021 19:26	Josef B Mick	2285369
EPA 200.8 Rev. 5.4	10/21/2021	10/28/2021 09:15	Emily M Philpot	11/01/2021 16:41	Alexander Thompson	2285369
	10/21/2021	10/28/2021 09:15	Emily M Philpot	11/01/2021 18:15	Alexander Thompson	2285369
	10/21/2021	10/28/2021 09:15	Emily M Philpot	11/02/2021 13:31	Alexander Thompson	2285369
EPA 350.1 Rev. 2.0	10/21/2021			11/02/2021 13:17	Ping Hua	2285365
EPA 351.2 Rev. 2.0	10/21/2021	11/03/2021 12:43	Benjamin T. Nordmann	11/04/2021 11:49	Alexandra J Mattheus	2285365
EPA 353.2 Rev. 2.0	10/21/2021			11/01/2021 10:23	Beverly Y. Sanders	2285365
EPA 365.1 Rev. 2.0	10/21/2021	10/25/2021 13:13	Simonne.V. Calhoun	10/26/2021 12:17	Lipi Saha	2285365
EPA 365.1 Rev. 2.0 dissolved	10/21/2021			10/21/2021 15:04	James L Waggeby	2285366
SM 2320 B-2011	10/21/2021			10/23/2021 08:49	Dale L. Simmons	2285364
SM 2540 D-2011	10/21/2021			10/26/2021 15:36	Yijie Li	2285364
SM 4500 F-C-2011	10/21/2021			10/23/2021 05:25	Dale L. Simmons	2285364
SM 5310 B-2011	10/21/2021			10/29/2021 05:29	Khloe J Berg	2285365