

Chemical Analysis Report

NE-DIST-2021-05-25-01

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-2021-05-24-20**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 15-JUN-2021 10:01

A handwritten signature in black ink, appearing to read "Liang Lin", is shown 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 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: 05/24/2021 09:35

Field ID: G5NE0601

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2249816	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P398744	
	SM 2320 B-2011	Total Alkalinity	121		mg CaCO3/L	P399027	
	SM 2540 D-2011	TSS	8	I	mg/L	P399005	
	SM 4500 F-C-2011	Fluoride	1.0		mg F/L	P399029	
2249817	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P399175	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P399326	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P398856	
	EPA 365.1 Rev. 2.0	Total-P	0.073		mg P/L	P398920	
	SM 5310 B-2011	Organic Carbon	8.7		mg C/L	P399097	
2249818	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.028		mg P/L	P398747	
2249821	EPA 200.7 Rev. 4.4	Calcium	374		mg/L	P398821	
		Chromium	4.0	U	ug/L	P398821	
		Iron	220	I	ug/L	P398821	
		Magnesium	1.13E+03		mg/L	P398821	
		Manganese	41		ug/L	P398821	
		Zinc	20	U	ug/L	P398821	
	EPA 200.8 Rev. 5.4	Aluminum	262		ug/L	P398821	
		Antimony	0.22	I	ug/L	P398821	
		Arsenic	2.52		ug/L	P398821	
		Beryllium	0.040	U	ug/L	P398821	
		Cadmium	0.080	U	ug/L	P398821	
		Copper	1.6	U	ug/L	P398821	
		Lead	0.80	U	ug/L	P398821	
		Nickel	2.0	U	ug/L	P398821	
		Selenium	0.80	U	ug/L	P398821	
		Silver	0.040	U	ug/L	P398821	
		Thallium	0.40	U	ug/L	P398821	

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 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: P398744

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P398821

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Chromium	1.0	U	ug/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: P398821

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
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: P399175

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399326

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398856

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P398920

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: P398747

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

Reference Method: SM 2320 B-2011
Batch ID: P399027

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

Reference Method: SM 2540 D-2011
Batch ID: P399005

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P399029

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P399097

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: P398821

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	107		P	85 - 115
Chromium	96.8		P	85 - 115
Iron	108		P	85 - 115
Magnesium	104		P	85 - 115
Manganese	103		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P398821

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.4		P	80 - 120
Antimony	98.2		P	80 - 120
Arsenic	102		P	80 - 120
Beryllium	88.9		P	80 - 120
Cadmium	104		P	80 - 120
Copper	100		P	80 - 120
Lead	95.8		P	80 - 120
Nickel	99.3		P	80 - 120
Selenium	102		P	80 - 120
Silver	98.6		P	80 - 120
Thallium	104		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P399175

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P399326

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: P398856

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: P398920

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: P398747

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.6		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P399027

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

Reference Method: SM 4500 F-C-2011
Batch ID: P399029

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.2		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P399097

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.7		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P398821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249541	Calcium	75.0	93.8	P/P	70 - 130
2249541	Chromium	95.4	98.4	P/P	70 - 130
2249541	Iron	108	108	P/P	70 - 130
2249541	Manganese	101	102	P/P	70 - 130
2249541	Zinc	103	103	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P398821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249541	Aluminum	94.1	96.3	P/P	70 - 130
2249541	Antimony	94.4	95.3	P/P	70 - 130
2249541	Arsenic	102	103	P/P	70 - 130
2249541	Beryllium	94.8	96.4	P/P	70 - 130
2249541	Cadmium	95.3	98.5	P/P	70 - 130
2249541	Copper	98.0	99.5	P/P	70 - 130
2249541	Lead	90.8	91.4	P/P	70 - 130
2249541	Nickel	98.7	100	P/P	70 - 130
2249541	Selenium	96.5	98.6	P/P	70 - 130
2249541	Silver	95.1	94.0	P/P	70 - 130
2249541	Thallium	98.3	99.8	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P399175

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249523	Ammonia-N	98.8	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P399326

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249817	Kjeldahl Nitrogen	95.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P398856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249295	NO2NO3-N	97.9	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P398920

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249817	Total-P	100	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P398747

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249524	O-Phosphate-P	100	101	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P399029

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2250822	Fluoride	98.2	98.8	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P399097

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2250817	Organic Carbon	97.4	97.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P398744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249627	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P398821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249541	Calcium	1.44	Spike	P	0 - 20
2249541	Chromium	3.16	Spike	P	0 - 20
2249541	Iron	0.374	Spike	P	0 - 20
2249541	Magnesium	0.701	Spike	P	0 - 20
2249541	Manganese	0.728	Spike	P	0 - 20
2249541	Zinc	0.572	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P398821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249541	Aluminum	1.89	Spike	P	0 - 20
2249541	Antimony	0.911	Spike	P	0 - 20
2249541	Arsenic	0.945	Spike	P	0 - 20
2249541	Beryllium	1.66	Spike	P	0 - 20
2249541	Cadmium	3.29	Spike	P	0 - 20
2249541	Copper	1.48	Spike	P	0 - 20
2249541	Lead	0.701	Spike	P	0 - 20
2249541	Nickel	1.40	Spike	P	0 - 20
2249541	Selenium	2.09	Spike	P	0 - 20
2249541	Silver	1.18	Spike	P	0 - 20
2249541	Thallium	1.47	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399175

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249523	Ammonia-N	0.976	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249817	Kjeldahl Nitrogen	3.99	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249295	NO2NO3-N	0.361	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P398920

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249817	Total-P	1.72	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249524	O-Phosphate-P	0.497	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P399027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2250822	Total Alkalinity	0.471	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011
Batch ID: P399029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2250822	Fluoride	0.461	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P399097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2250817	Organic Carbon	0.323	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: A105648

Included Lab Sample IDs: 2249816

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A105649

Included Lab Sample IDs: 2249818

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.7	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A105695

Included Lab Sample IDs: 2249817

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A105759

Included Lab Sample IDs: 2249821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Antimony	96.1	96.8	P/P	90 - 110
Arsenic	102	103	P/P	90 - 110
Beryllium	96.8	98.3	P/P	90 - 110
Cadmium	100	99.9	P/P	90 - 110
Copper	98.3	99.8	P/P	90 - 110
Lead	96.5	96.1	P/P	90 - 110
Nickel	98.9	100	P/P	90 - 110
Selenium	102	104	P/P	90 - 110
Silver	98.4	99.3	P/P	90 - 110
Thallium	93.2	93.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A105760

Included Lab Sample IDs: 2249817

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

Reference Method: SM 2320 B-2011

Run ID: A105786

Included Lab Sample IDs: 2249816

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	97.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A105786

Included Lab Sample IDs: 2249816

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A105798

Included Lab Sample IDs: 2249821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Chromium	100	101	P/P	90 - 110
Iron	103	103	P/P	90 - 110
Magnesium	102	103	P/P	90 - 110
Manganese	103	104	P/P	90 - 110
Zinc	101	103	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A105818

Included Lab Sample IDs: 2249817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.7	99.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A105849

Included Lab Sample IDs: 2249817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A105971

Included Lab Sample IDs: 2249817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.2	94.7	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					0.0	
EPA 200.7 Rev. 4.4	Calcium	107	75.0	93.8			1.44
	Chromium	96.8	95.4	98.4			3.16
	Iron	108	108	108			0.374
	Magnesium	104					0.701
	Manganese	103	101	102			0.728
	Zinc	101	103	103			0.572
EPA 200.8 Rev. 5.4	Aluminum	99.4	94.1	96.3			1.89
	Antimony	98.2	94.4	95.3			0.911
	Arsenic	102	102	103			0.945
	Beryllium	88.9	94.8	96.4			1.66
	Cadmium	104	95.3	98.5			3.29
	Copper	100	98.0	99.5			1.48
	Lead	95.8	90.8	91.4			0.701
	Nickel	99.3	98.7	100			1.40
	Selenium	102	96.5	98.6			2.09
	Silver	98.6	95.1	94.0			1.18
	Thallium	104	98.3	99.8			1.47
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	98.8	97.4			0.976
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	95.2	100			3.99
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	97.9	98.4			0.361
EPA 365.1 Rev. 2.0	Total-P	105	100	98.4			1.72
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	100	101			0.497
SM 2320 B-2011	Total Alkalinity	97.2				0.471	
SM 4500 F-C-2011	Fluoride	99.2	98.2	98.8			0.461
SM 5310 B-2011	Organic Carbon	97.7	97.4	97.1			0.323

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2249816
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2249821
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2249821
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2249817
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2249817
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2249817
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2249817
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2249818
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2249816
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2249816
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2249816
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2249817

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	05/25/2021			05/25/2021 15:36	Yen Ta	2249816
EPA 200.7 Rev. 4.4	05/25/2021	05/26/2021 15:10	Elliott D. Healy	06/01/2021 12:40	Betina Topolski	2249821
	05/25/2021	05/26/2021 15:10	Elliott D. Healy	06/01/2021 13:00	Betina Topolski	2249821
EPA 200.8 Rev. 5.4	05/25/2021	05/26/2021 15:10	Elliott D. Healy	05/27/2021 18:40	Alexander Thompson	2249821
EPA 350.1 Rev. 2.0	05/25/2021			06/03/2021 13:53	Roberta Tatti	2249817
EPA 351.2 Rev. 2.0	05/25/2021	06/07/2021 13:44	Benjamin T. Nordmann	06/09/2021 15:17	Virginia P. Brown	2249817
EPA 353.2 Rev. 2.0	05/25/2021			05/26/2021 15:19	Touraj Touran	2249817
EPA 365.1 Rev. 2.0	05/25/2021	05/27/2021 13:22	Yen Ta	05/28/2021 13:00	Shengyu Ding	2249817
EPA 365.1 Rev. 2.0 dissolved	05/25/2021			05/25/2021 14:59	Ping Hua	2249818
SM 2320 B-2011	05/25/2021			05/29/2021 05:31	Dale L. Simmons	2249816
SM 2540 D-2011	05/25/2021			05/27/2021 14:42	Yijie Li	2249816
SM 4500 F-C-2011	05/25/2021			05/29/2021 02:32	Dale L. Simmons	2249816
SM 5310 B-2011	05/25/2021			06/02/2021 09:12	Madeline Gruver	2249817