Chemical Analysis Report

NE-DIST-2021-12-16-01

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-2021-11-01-14**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 10-JAN-2022 15:00

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: 12/15/2021 10:40**

Field ID: G5NE0601 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2295734	EPA 180.1 Rev. 2.0	Turbidity	4.6		NTU	P407570	
	SM 2320 B-2011	Total Alkalinity	108		mg CaCO3/L	P407723	
	SM 2540 D-2011	TSS	9	I A	mg/L	P407768	
	SM 4500 F-C-2011	Fluoride	0.68		mg F/L	P407725	
2295735	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P408016	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P407956	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.049		mg N/L	P407920	
	EPA 365.1 Rev. 2.0	Total-P	0.073		mg P/L	P407841	
	SM 5310 B-2011	Organic Carbon	8.6		mg C/L	P407797	
2295736	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P407559	
2295739	EPA 200.7 Rev. 4.4	Calcium	237		mg/L	P407727	
		Iron	170	I	ug/L	P407727	
		Magnesium	679		mg/L	P407727	
		Manganese	16		ug/L	P407727	
		Zinc	16	I	ug/L	P407727	
	EPA 200.8 Rev. 5.4	Aluminum	235		ug/L	P407727	
		Antimony	0.20	U	ug/L	P407727	
		Arsenic	1.84		ug/L	P407727	
		Beryllium	0.040	U	ug/L	P407727	
		Cadmium	0.080	U	ug/L	P407727	
		Chromium	1.6	U	ug/L	P407727	
		Copper	1.6	U	ug/L	P407727	
		Lead	0.80	U	ug/L	P407727	
		Nickel	2.0	U	ug/L	P407727	
		Selenium	0.80	U	ug/L	P407727	
		Silver	0.040	U	ug/L	P407727	
		Thallium	0.40	U	ug/L	P407727	

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407570

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407727

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: P407727

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: P408016

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407956

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407920

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407841

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: P407559

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

Reference Method: SM 2320 B-2011
Batch ID: P407723

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 D-2011
Batch ID: P407768

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P407725

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P407797

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: P407727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	106		P	85 - 115
Magnesium	104		P	85 - 115
Manganese	101		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.6		P	85 - 115
Antimony	96.7		P	85 - 115
Arsenic	96.5		P	85 - 115
Beryllium	90.0		P	85 - 115
Cadmium	98.4		P	85 - 115
Chromium	95.8		P	85 - 115
Copper	96.0		P	85 - 115
Lead	98.9		P	85 - 115
Nickel	96.5		P	85 - 115
Selenium	97.5		P	85 - 115
Silver	103		P	85 - 115
Thallium	89.9		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408016

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407956

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407920

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407841

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P407559

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P407723

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P407725

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P407797

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2296177	Calcium	102	104	P/P	80 - 120
2296177	Iron	106	109	P/P	80 - 120
2296177	Magnesium	106	108	P/P	80 - 120
2296177	Manganese	101	101	P/P	80 - 120
2296177	Zinc	103	103	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2296177	Aluminum	104	103	P/P	80 - 120
2296177	Antimony	103	103	P/P	80 - 120
2296177	Arsenic	102	101	P/P	80 - 120
2296177	Beryllium	96.2	96.4	P/P	80 - 120
2296177	Cadmium	102	101	P/P	80 - 120
2296177	Chromium	102	101	P/P	80 - 120
2296177	Copper	103	101	P/P	80 - 120
2296177	Lead	105	105	P/P	80 - 120
2296177	Nickel	102	101	P/P	80 - 120
2296177	Selenium	102	99.1	P/P	80 - 120
2296177	Silver	106	105	P/P	80 - 120
2296177	Thallium	97.4	101	P/P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408016

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2296265	Ammonia-N	107	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407956

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295333	Kjeldahl Nitrogen	92.8	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407920

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295948	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295947	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P407559

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295702	O-Phosphate-P	95.5	95.4	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P407725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295946	Fluoride	102	102	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P407797

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2295735	Organic Carbon	90.0	91.5	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407570

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295626	Turbidity	8.47	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2296177	Calcium	1.75	Spike	P	0 - 20
2296177	Iron	2.17	Spike	P	0 - 20
2296177	Magnesium	1.56	Spike	P	0 - 20
2296177	Manganese	0.103	Spike	P	0 - 20
2296177	Zinc	0.0689	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2296177	Aluminum	0.623	Spike	P	0 - 20
2296177	Antimony	0.332	Spike	P	0 - 20
2296177	Arsenic	0.501	Spike	P	0 - 20
2296177	Beryllium	0.195	Spike	P	0 - 20
2296177	Cadmium	1.15	Spike	P	0 - 20
2296177	Chromium	0.603	Spike	P	0 - 20
2296177	Copper	1.45	Spike	P	0 - 20
2296177	Lead	0.133	Spike	P	0 - 20
2296177	Nickel	0.463	Spike	P	0 - 20
2296177	Selenium	2.89	Spike	P	0 - 20
2296177	Silver	0.743	Spike	P	0 - 20
2296177	Thallium	4.07	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2296265	Ammonia-N	1.38	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295333	Kjeldahl Nitrogen	2.42	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407920

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295948	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295947	Total-P	0.907	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P407559

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295702	O-Phosphate-P	0.0971	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P407723

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295946	Total Alkalinity	0.488	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011
Batch ID: P407725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295946	Fluoride	0.0	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P407797

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2295735	Organic Carbon	1.38	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: A109435
Included Lab Sample IDs: 2295736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	98.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A109439
Included Lab Sample IDs: 2295734

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

Reference Method: SM 2320 B-2011
Run ID: A109500
Included Lab Sample IDs: 2295734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.9	99.4	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A109500
Included Lab Sample IDs: 2295734

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

Reference Method: SM 5310 B-2011
Run ID: A109530
Included Lab Sample IDs: 2295735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	92.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A109575
Included Lab Sample IDs: 2295739

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.2	98.8	P/P	90 - 110
Iron	103	101	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Manganese	98.1	98.2	P/P	90 - 110
Zinc	97.4	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A109583
Included Lab Sample IDs: 2295735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	103	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A109592
Included Lab Sample IDs: 2295735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A109624
Included Lab Sample IDs: 2295739

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	99.7	99.8	P/P	90 - 110
Arsenic	98.4	101	P/P	90 - 110
Cadmium	99.5	100	P/P	90 - 110
Copper	97.3	101	P/P	90 - 110
Lead	98.5	98.5	P/P	90 - 110
Nickel	97.4	101	P/P	90 - 110
Selenium	98.6	100	P/P	90 - 110
Silver	103	103	P/P	90 - 110
Thallium	109	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A109639
Included Lab Sample IDs: 2295735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A109640
Included Lab Sample IDs: 2295735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.2	98.9	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A109643
Included Lab Sample IDs: 2295739

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	101	P/P	90 - 110
Beryllium	103	97.5	P/P	90 - 110
Chromium	100	98.6	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					8.47	
EPA 200.7 Rev. 4.4	Calcium	103	102	104			1.75
	Iron	106	106	109			2.17
	Magnesium	104	106	108			1.56
	Manganese	101	101	101			0.103
	Zinc	102	103	103			0.0689
EPA 200.8 Rev. 5.4	Aluminum	98.6	104	103			0.623
	Antimony	96.7	103	103			0.332
	Arsenic	96.5	102	101			0.501
	Beryllium	90.0	96.2	96.4			0.195
	Cadmium	98.4	102	101			1.15
	Chromium	95.8	102	101			0.603
	Copper	96.0	103	101			1.45
	Lead	98.9	105	105			0.133
	Nickel	96.5	102	101			0.463
	Selenium	97.5	102	99.1			2.89
	Silver	103	106	105			0.743
	Thallium	89.9	97.4	101			4.07
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	107	106			1.38
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	92.8	95.5			2.42
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.0
EPA 365.1 Rev. 2.0	Total-P	107	102	102			0.907
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	95.5	95.4			0.0971
SM 2320 B-2011	Total Alkalinity	100				0.488	
SM 4500 F-C-2011	Fluoride	102	102	102			0.0
SM 5310 B-2011	Organic Carbon	96.1	90.0	91.5			1.38

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2295734
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2295739
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2295739
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2295735
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2295735
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2295735
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2295735
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2295736
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2295734
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2295734
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2295734
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2295735

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	12/16/2021			12/16/2021 15:31	Khloe J Berg	2295734
EPA 200.7 Rev. 4.4	12/16/2021	12/21/2021 11:00	Vijayalakshmi Reddy	12/27/2021 22:42	Josef B Mick	2295739
	12/16/2021	12/21/2021 11:00	Vijayalakshmi Reddy	12/27/2021 22:50	Josef B Mick	2295739
EPA 200.8 Rev. 5.4	12/16/2021	12/21/2021 11:00	Vijayalakshmi Reddy	01/03/2022 14:16	Alexander Thompson	2295739
	12/16/2021	12/21/2021 11:00	Vijayalakshmi Reddy	12/29/2021 22:02	McKinley C Carter	2295739
EPA 350.1 Rev. 2.0	12/16/2021			01/03/2022 13:09	Roberta Tatti	2295735
EPA 351.2 Rev. 2.0	12/16/2021	12/29/2021 11:36	Samantha L Bates	01/03/2022 16:19	Alexandra J Mattheus	2295735
EPA 353.2 Rev. 2.0	12/16/2021			12/28/2021 10:08	Beverly Y. Sanders	2295735
EPA 365.1 Rev. 2.0	12/16/2021	12/27/2021 15:00	Simonne.V. Calhoun	12/28/2021 15:11	Shengyu Ding	2295735
EPA 365.1 Rev. 2.0 dissolved	12/16/2021			12/16/2021 14:27	James L Waggerby	2295736
SM 2320 B-2011	12/16/2021			12/21/2021 00:16	Dale L. Simmons	2295734
SM 2540 D-2011	12/16/2021			12/17/2021 15:35	Yijie Li	2295734
SM 4500 F-C-2011	12/16/2021			12/20/2021 23:27	Dale L. Simmons	2295734
SM 5310 B-2011	12/16/2021			12/21/2021 06:02	Khloe J Berg	2295735