

Chemical Analysis Report

SO-DIST-2021-06-23-03

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

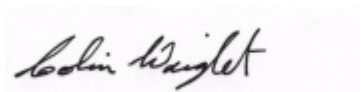
Event Description: **2021 SMP : Continuous Flopbuck**
Request ID: **RQ-2021-06-21-13**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
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Certified by: Colin Wright, Program Administrator

Date Certified: 16-JUL-2021 08:41

A handwritten signature in black ink, appearing to read "Colin Wright", 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: FlopbuckNearPearlSt

Collection Date/Time: 06/22/2021 09:15

Field ID: G3SD0185

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2256720	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P400135	
	SM 2320 B-2011	Total Alkalinity	131		mg CaCO3/L	P400494	
	SM 2540 D-2011	TSS	8	I	mg/L	P400247	
	SM 4500 F-C-2011	Fluoride	1.0		mg F/L	P400496	
2256721	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P400458	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P400321	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P400160	
	EPA 365.1 Rev. 2.0	Total-P	0.35		mg P/L	P400297	
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P400363	
2256722	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.23		mg P/L	P400129	
2256725	EPA 200.7 Rev. 4.4	Calcium	334		mg/L	P400105	
		Iron	300	U	ug/L	P400105	
		Magnesium	908		mg/L	P400105	
		Manganese	31	I	ug/L	P400105	
		Zinc	50	U	ug/L	P400105	
	EPA 200.8 Rev. 5.4	Aluminum	119		ug/L	P400105	
		Antimony	0.36	I	ug/L	P400105	
		Arsenic	3.88		ug/L	P400105	
		Beryllium	0.040	U	ug/L	P400105	
		Cadmium	0.080	U	ug/L	P400105	
		Chromium	1.6	U	ug/L	P400105	
		Copper	1.6	U	ug/L	P400105	
		Lead	0.80	U	ug/L	P400105	
		Nickel	5.0	U	ug/L	P400105	
		Selenium	0.80	U	ug/L	P400105	
		Silver	0.040	U	ug/L	P400105	
		Thallium	1.0	U	ug/L	P400105	
	SM 2340B	Hardness	4570		mg/L	P400105	

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.

SM 2340B: 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: P400135

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P400105

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: P400105

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: P400458

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400321

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400160

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400297

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: P400129

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

Reference Method: SM 2320 B-2011
Batch ID: P400494

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

Reference Method: SM 2540 D-2011
Batch ID: P400247

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P400496

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P400363

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: P400105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	102		P	85 - 115
Magnesium	99.6		P	85 - 115
Manganese	100		P	85 - 115
Zinc	92.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P400105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	105		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	102		P	85 - 115
Beryllium	97.9		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	99.8		P	85 - 115
Copper	98.8		P	85 - 115
Lead	115		P	85 - 115
Nickel	101		P	85 - 115
Selenium	103		P	85 - 115
Silver	101		P	85 - 115
Thallium	105		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400458

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: P400321

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400160

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: P400297

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400129

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P400494

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

Reference Method: SM 4500 F-C-2011
Batch ID: P400496

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

Reference Method: SM 5310 B-2011
Batch ID: P400363

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P400105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256563	Iron	102	102	P/P	70 - 130
2256563	Manganese	98.0	97.6	P/P	70 - 130
2256563	Zinc	86.9	87.3	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P400105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256563	Aluminum	106	107	P/P	70 - 130
2256563	Antimony	110	107	P/P	70 - 130
2256563	Arsenic	121	117	P/P	70 - 130
2256563	Beryllium	113	109	P/P	70 - 130
2256563	Cadmium	102	99.3	P/P	70 - 130
2256563	Chromium	111	106	P/P	70 - 130
2256563	Copper	121	116	P/P	70 - 130
2256563	Lead	101	99.8	P/P	70 - 130
2256563	Nickel	124	120	P/P	70 - 130
2256563	Selenium	109	107	P/P	70 - 130
2256563	Silver	98.6	98.1	P/P	70 - 130
2256563	Thallium	112	112	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P400458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256136	Ammonia-N	97.0	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P400321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255577	Kjeldahl Nitrogen	105	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P400160

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256447	NO2NO3-N	96.2	95.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256136	Total-P	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P400129

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256629	O-Phosphate-P	107	108	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P400496

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256523	Fluoride	99.5	101	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P400363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255144	Organic Carbon	95.7	95.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P400135

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256666	Turbidity	2.12	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P400105

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256563	Calcium	0.528	Spike	P	0 - 20
2256563	Iron	0.201	Spike	P	0 - 20
2256563	Magnesium	1.04	Spike	P	0 - 20
2256563	Manganese	0.353	Spike	P	0 - 20
2256563	Zinc	0.485	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P400105

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256563	Aluminum	0.584	Spike	P	0 - 20
2256563	Antimony	2.64	Spike	P	0 - 20
2256563	Arsenic	2.84	Spike	P	0 - 20
2256563	Beryllium	4.32	Spike	P	0 - 20
2256563	Cadmium	2.56	Spike	P	0 - 20
2256563	Chromium	4.52	Spike	P	0 - 20
2256563	Copper	3.81	Spike	P	0 - 20
2256563	Lead	1.32	Spike	P	0 - 20
2256563	Nickel	3.51	Spike	P	0 - 20
2256563	Selenium	1.16	Spike	P	0 - 20
2256563	Silver	0.553	Spike	P	0 - 20
2256563	Thallium	0.309	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P400458

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256136	Ammonia-N	0.233	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P400321

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255577	Kjeldahl Nitrogen	3.65	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P400160

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256447	NO2NO3-N	0.503	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P400297

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256136	Total-P	1.71	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P400129

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256629	O-Phosphate-P	0.894	Spike	P	0 - 20

Reference Method: SM 2320 B-2011

Batch ID: P400494

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256523	Total Alkalinity	1.44	Sample	P	0 - 5.2

Reference Method: SM 4500 F-C-2011

Batch ID: P400496

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256523	Fluoride	0.953	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011

Batch ID: P400363

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255144	Organic Carbon	0.523	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: A106235

Included Lab Sample IDs: 2256722

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	97.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A106237

Included Lab Sample IDs: 2256720

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A106254

Included Lab Sample IDs: 2256721

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	99.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A106270

Included Lab Sample IDs: 2256725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	104	P/P	90 - 110
Antimony	98.5	99.9	P/P	90 - 110
Arsenic	101	104	P/P	90 - 110
Beryllium	94.5	95.9	P/P	90 - 110
Cadmium	97.6	99.2	P/P	90 - 110
Chromium	99.7	102	P/P	90 - 110
Copper	104	107	P/P	90 - 110
Nickel	106	106	P/P	90 - 110
Selenium	98.9	99.1	P/P	90 - 110
Silver	99.9	99.6	P/P	90 - 110
Thallium	95.1	95.4	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A106279

Included Lab Sample IDs: 2256725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	95.5	97.0	P/P	90 - 110
Iron	95.7	96.9	P/P	90 - 110
Magnesium	94.6	95.9	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Zinc	90.2	93.7	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A106310

Included Lab Sample IDs: 2256725

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106339

Included Lab Sample IDs: 2256721

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

Reference Method: SM 5310 B-2011

Run ID: A106360

Included Lab Sample IDs: 2256721

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.9	97.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A106396

Included Lab Sample IDs: 2256721

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	97.3	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A106416

Included Lab Sample IDs: 2256720

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A106416

Included Lab Sample IDs: 2256720

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A106443

Included Lab Sample IDs: 2256721

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.0	96.7	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					2.12	
EPA 200.7 Rev. 4.4	Calcium	100					0.528
	Iron	102	102	102			0.201
	Magnesium	99.6					1.04
	Manganese	100	98.0	97.6			0.353
	Zinc	92.1	86.9	87.3			0.485
EPA 200.8 Rev. 5.4	Aluminum	105	106	107			0.584
	Antimony	104	110	107			2.64
	Arsenic	102	121	117			2.84
	Beryllium	97.9	113	109			4.32
	Cadmium	101	102	99.3			2.56
	Chromium	99.8	111	106			4.52
	Copper	98.8	121	116			3.81
	Lead	115	101	99.8			1.32
	Nickel	101	124	120			3.51
	Selenium	103	109	107			1.16
	Silver	101	98.6	98.1			0.553
	Thallium	105	112	112			0.309
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	97.0	96.6			0.233
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	105	100			3.65
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.0	96.2	95.6			0.503
EPA 365.1 Rev. 2.0	Total-P	106	103	105			1.71
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	107	108			0.894
SM 2320 B-2011	Total Alkalinity	102				1.44	
SM 4500 F-C-2011	Fluoride	100	99.5	101			0.953
SM 5310 B-2011	Organic Carbon	96.6	95.7	95.1			0.523

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2256720
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2256725
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2256725
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2256721
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2256721
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2256721
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2256721
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2256722
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2256720
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2256725
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2256720
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2256720
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2256721

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	06/23/2021			06/23/2021 15:19	Sarah A Nixon	2256720
EPA 200.7 Rev. 4.4	06/23/2021	06/23/2021 14:10	Elliott D. Healy	06/25/2021 02:18	Josef B Mick	2256725
EPA 200.8 Rev. 5.4	06/23/2021	06/23/2021 14:10	Elliott D. Healy	06/24/2021 21:58	Alexander Thompson	2256725
	06/23/2021	06/23/2021 14:10	Elliott D. Healy	06/24/2021 23:53	Alexander Thompson	2256725
	06/23/2021	06/23/2021 14:10	Elliott D. Healy	06/25/2021 19:50	Alexander Thompson	2256725
	06/23/2021	06/23/2021 14:10	Elliott D. Healy	07/01/2021 12:43	Roberta Tatti	2256721
EPA 350.1 Rev. 2.0	06/23/2021					
EPA 351.2 Rev. 2.0	06/23/2021	06/29/2021 12:58	Benjamin T. Nordmann	07/02/2021 19:12	Letuzia M De Oliveira	2256721
EPA 353.2 Rev. 2.0	06/23/2021			06/24/2021 12:00	Beverly Y. Sanders	2256721
EPA 365.1 Rev. 2.0	06/23/2021	06/28/2021 17:29	Madeline Gruver	06/29/2021 09:46	Shengyu Ding	2256721
EPA 365.1 Rev. 2.0 dissolved	06/23/2021			06/23/2021 15:14	Ping Hua	2256722
SM 2320 B-2011	06/23/2021			07/02/2021 02:00	Patrick M. Roche	2256720
SM 2340B	06/23/2021			06/25/2021 02:18	Josef B Mick	2256725
SM 2540 D-2011	06/23/2021			06/24/2021 14:15	Yijie Li	2256720
SM 4500 F-C-2011	06/23/2021			07/02/2021 00:48	Patrick M. Roche	2256720
SM 5310 B-2011	06/23/2021			06/29/2021 15:03	Madeline Gruver	2256721