

Chemical Analysis Report

CEN-DIST-2021-01-20-01

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

Event Description: **Okahumpka/Deaton/Hidden**
Request ID: **RQ-2021-01-11-60**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 10-FEB-2021 10:04

A handwritten signature in black ink, appearing to read "Liang Lin", 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 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: Lake Okahumpka At Center

Collection Date/Time: 01/19/2021 10:57

Field ID: G4CE0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2220159	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P392687	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P392735	
		Sulfate	0.20	U	mg SO4/L	P392737	
	SM 2120 B-2011	Color (true)	25	A	PCU	P392634	
	SM 2320 B-2011	Total Alkalinity	91	A	mg CaCO3/L	P392852	
	SM 2540 C-2011	TDS	192		mg/L	P393017	
	SM 2540 D-2011	TSS	2	I	mg/L	P392977	
	SM 4500 F-C-2011	Fluoride	0.32		mg F/L	P392857	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P393333	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P393094	
2220161	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P392813	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P392786	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P392755	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P392635	
	dissolved						

Ref. Method and Comment:

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

Sample Location: Lake Deaton @ Center

Collection Date/Time: 01/19/2021 11:48

Field ID: G4CE0160

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2220160	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P392687	
	EPA 300.0 Rev. 2.1	Chloride	31		mg Cl/L	P392735	
		Sulfate	1.9		mg SO4/L	P392737	
	SM 2120 B-2011	Color (true)	37		PCU	P392634	
	SM 2320 B-2011	Total Alkalinity	29		mg CaCO3/L	P392852	
	SM 2540 C-2011	TDS	121		mg/L	P393017	
	SM 2540 D-2011	TSS	2	I	mg/L	P392977	
	SM 4500 F-C-2011	Fluoride	0.12		mg F/L	P392857	
2220162	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P393205	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P393094	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P392813	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P392786	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P392755	
2220164	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P392635	

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: P392687

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392735

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393205

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392813

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392786

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P392634

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P392852

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

Reference Method: SM 2540 C-2011
Batch ID: P393017

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P392977

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P392857

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P392755

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392735

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393205

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.3		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392813

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392786

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.4		P	90 - 110

Reference Method: SM 2120 B-2011
Batch ID: P392634

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P392852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.3		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P392857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.3		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P392755

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	101		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219991	Chloride	101		P	90 - 110
2220176	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219991	Sulfate	104		P	90 - 110
2220176	Sulfate	107		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393205

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219920	Ammonia-N	99.2	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219973	Ammonia-N	101	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220056	Kjeldahl Nitrogen	98.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220107	NO2NO3-N	97.2	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220161	Total-P	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220163	O-Phosphate-P	99.5	99.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P392857

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220159	Fluoride	95.8	95.8	P/P	94 - 107

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P392755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220106	Organic Carbon	98.9	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P392687

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220076	Turbidity	0.258	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220176	Chloride	0.931	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220176	Sulfate	1.17	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2219920	Ammonia-N	1.72	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2219973	Ammonia-N	3.17	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220056	Kjeldahl Nitrogen	1.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220107	NO2NO3-N	0.685	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220161	Total-P	1.50	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P392635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220163	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
 Batch ID: P392634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220159	Color (true)	1.64	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P392852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220159	Total Alkalinity	1.59	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P393017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220105	TDS	6.32	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P392857

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220159	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P392755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220106	Organic Carbon	1.50	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A103140

Included Lab Sample IDs: 2220159, 2220160

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A103142

Included Lab Sample IDs: 2220163, 2220164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.9	P/P	90 - 110
O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103154

Included Lab Sample IDs: 2220159, 2220160

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A103158

Included Lab Sample IDs: 2220159, 2220160

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: SM 5310 B-2011

Run ID: A103188

Included Lab Sample IDs: 2220161, 2220162

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103210

Included Lab Sample IDs: 2220161, 2220162

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

Reference Method: SM 2320 B-2011

Run ID: A103220

Included Lab Sample IDs: 2220159, 2220160

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	91.9	94.9	P/P	90 - 110
Total Alkalinity	94.4	91.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A103220

Included Lab Sample IDs: 2220159, 2220160

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	99.5	P/P	90 - 110
Fluoride	99.5	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103237

Included Lab Sample IDs: 2220161, 2220162

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	95.8	P/P	90 - 110
Total-P	99.8	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103322

Included Lab Sample IDs: 2220161, 2220162

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.9	96.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103348

Included Lab Sample IDs: 2220162

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	93.0	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103396

Included Lab Sample IDs: 2220161

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					0.258	
EPA 300.0 Rev. 2.1	Chloride	102	102	101		0.931	
	Sulfate	104	107	104		1.17	
EPA 350.1 Rev. 2.0	Ammonia-N	98.3	99.2	101			1.72
	Ammonia-N	103	101	104			3.17
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.3	98.2	100			1.33
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	97.2	98.2			0.685
EPA 365.1 Rev. 2.0	Total-P	104	102	103			1.50
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	99.5	99.5			0.0
SM 2120 B-2011	Color (true)	101				1.64	
SM 2320 B-2011	Total Alkalinity	95.3				1.59	
SM 2540 C-2011	TDS					6.32	
SM 4500 F-C-2011	Fluoride	95.3	95.8	95.8			0.0
SM 5310 B-2011	Organic Carbon	101	98.9	102			1.50

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2220159, 2220160
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2220159, 2220160
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2220159, 2220160
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2220161, 2220162
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2220161, 2220162
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2220161, 2220162
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2220161, 2220162
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2220163, 2220164
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2220159, 2220160
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2220159, 2220160
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2220159, 2220160
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2220159, 2220160
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2220159, 2220160
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2220161, 2220162

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	01/20/2021			01/20/2021 16:14	Yen Ta	2220159, 2220160
EPA 300.0 Rev. 2.1	01/20/2021			01/21/2021 23:31	Lipi Saha	2220159
	01/20/2021			01/21/2021 23:43	Lipi Saha	2220160
EPA 350.1 Rev. 2.0	01/20/2021			02/01/2021 18:58	Ping Hua	2220162
	01/20/2021			02/03/2021 16:48	Ping Hua	2220161
EPA 351.2 Rev. 2.0	01/20/2021	01/28/2021 17:00	Yen Ta	01/29/2021 15:57	Julia Storbeck	2220161
	01/20/2021	01/28/2021 17:00	Yen Ta	01/29/2021 15:59	Julia Storbeck	2220162
EPA 353.2 Rev. 2.0	01/20/2021			01/25/2021 09:37	Beverly Y. Sanders	2220161
	01/20/2021			01/25/2021 09:38	Beverly Y. Sanders	2220162
EPA 365.1 Rev. 2.0	01/20/2021	01/22/2021 17:15	Shengyu Wang	01/26/2021 10:50	Shengyu Wang	2220161
	01/20/2021	01/22/2021 17:15	Shengyu Wang	01/26/2021 10:58	Shengyu Wang	2220162
EPA 365.1 Rev. 2.0 dissolved	01/20/2021			01/20/2021 14:46	Blanca Fach	2220163
	01/20/2021			01/20/2021 14:57	Blanca Fach	2220164
SM 2120 B-2011	01/20/2021			01/20/2021 15:48	Benjamin T. Nordmann	2220159
	01/20/2021			01/20/2021 15:49	Benjamin T. Nordmann	2220160
SM 2320 B-2011	01/20/2021			01/21/2021 23:31	Dale L. Simmons	2220159
	01/20/2021			01/22/2021 01:09	Dale L. Simmons	2220160
SM 2540 C-2011	01/20/2021			01/22/2021 15:16	Yijie Li	2220159, 2220160
SM 2540 D-2011	01/20/2021			01/22/2021 15:16	Yijie Li	2220159, 2220160
SM 4500 F-C-2011	01/20/2021			01/21/2021 23:20	Dale L. Simmons	2220159
	01/20/2021			01/22/2021 01:09	Dale L. Simmons	2220160
SM 5310 B-2011	01/20/2021			01/22/2021 03:35	Touraj Touran	2220161
	01/20/2021			01/22/2021 03:49	Touraj Touran	2220162