

Chemical Analysis Report

CEN-DIST-2019-03-26-02

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

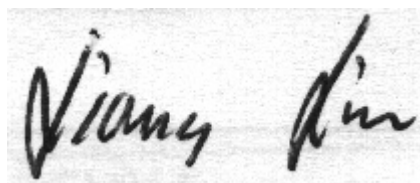
Event Description: **Lake Cypress / Dead / Hatch Drain**
Request ID: **RQ-2019-01-14-20**
Customer: **CEN-DIST**
Project ID: **SMP**

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

Date Certified: 11-APR-2019 13:50

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 CYPRESS @ CENTER

Collection Date/Time: 03/25/2019 11:34

Field ID: G4CE0166

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2072432	EPA 180.1 Rev. 2.0	Turbidity	8.1		NTU	P361084	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P361400	
		Sulfate	8.2		mg SO4/L	P361402	
	SM 2120 B	Color (true)	76		PCU	P361078	
	SM 2320 B-97	Total Alkalinity	31		mg CaCO3/L	P361651	
	SM 2540 C-97	TDS	111		mg/L	P361413	
	SM 2540 D-97	TSS	6	I	mg/L	P361417	
	SM 4500 F-C-97	Fluoride	0.088	I	mg F/L	P361655	
2072433	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P361376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P361211	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P361288	
	EPA 365.1 Rev. 2.0	Total-P	0.042		mg P/L	P361267	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P361173	
2072434	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361089	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: LAKE HATCHINEHA DRAIN DOWNSTREAM OF DRAINAGE FIELD **Collection Date/Time: 03/25/2019 11:02**

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2072429	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P361084	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P361400	
		Sulfate	16		mg SO4/L	P361402	
		Color (true)	110		PCU	P361078	
	SM 2320 B-97	Total Alkalinity	30		mg CaCO3/L	P361651	
	SM 2540 C-97	TDS	109		mg/L	P361413	
	SM 2540 D-97	TSS	5	I	mg/L	P361417	
	SM 4500 F-C-97	Fluoride	0.087	I	mg F/L	P361655	
2072430	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P361376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P361211	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P361287	
	EPA 365.1 Rev. 2.0	Total-P	0.049		mg P/L	P361267	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P361173	
2072431	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361089	

Ref. Method and Comment:

SM 2540 D-97: 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: P361084

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361400

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361376

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361211

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361287

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361288

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361267

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361089

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P361078

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P361651

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

Reference Method: SM 2540 C-97
Batch ID: P361413

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P361417

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P361655

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P361173

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: P361400

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361376

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361211

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	109		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361287

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361288

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: P361267

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361089

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

Reference Method: SM 2120 B
Batch ID: P361078

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-97
Batch ID: P361651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P361655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P361173

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072330	Chloride	101		P	90 - 110
2072401	Chloride	96.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072330	Sulfate	104		P	90 - 110
2072401	Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361376

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072402	Ammonia-N	96.9	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072441	Kjeldahl Nitrogen	98.1	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072430	NO2NO3-N	98.2	97.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072433	NO2NO3-N	98.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072449	Total-P	98.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072403	O-Phosphate-P	96.2	97.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P361655

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072446	Fluoride	99.5	99.5	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P361173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072332	Organic Carbon	97.7	98.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072444	Turbidity	2.40	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072401	Chloride	0.945	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072401	Sulfate	1.06	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072402	Ammonia-N	3.81	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072441	Kjeldahl Nitrogen	5.76	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072430	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072433	NO2NO3-N	1.53	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072449	Total-P	1.32	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P361089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072403	O-Phosphate-P	1.25	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P361078

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072401	Color (true)	0.128	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P361651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072446	Total Alkalinity	0.791	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P361413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072351	TDS	4.98	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P361655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072446	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P361173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072332	Organic Carbon	0.587	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A90241

Included Lab Sample IDs: 2072429, 2072432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.0	100	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A90242

Included Lab Sample IDs: 2072429, 2072432

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A90243

Included Lab Sample IDs: 2072431, 2072434

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.1	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A90286

Included Lab Sample IDs: 2072430, 2072433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A90325

Included Lab Sample IDs: 2072430, 2072433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	99.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A90326

Included Lab Sample IDs: 2072430, 2072433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	97.5	P/P	90 - 110
NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90350

Included Lab Sample IDs: 2072430, 2072433

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A90355

Included Lab Sample IDs: 2072430, 2072433

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A90374

Included Lab Sample IDs: 2072429, 2072432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	103	104	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A90475

Included Lab Sample IDs: 2072429, 2072432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.8	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A90475

Included Lab Sample IDs: 2072429, 2072432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.1	100	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					2.40	
EPA 300.0 Rev. 2.1	Chloride	102	96.7	101		0.945	
	Sulfate	103	99.2	104		1.06	
EPA 350.1 Rev. 2.0	Ammonia-N	100	96.9	103			3.81
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109	98.1	106			5.76
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	98.2	97.7			0.499
	NO2NO3-N	98.0	98.5	97.0			1.53
EPA 365.1 Rev. 2.0	Total-P	103	98.8	100			1.32
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7	96.2	97.8			1.25
SM 2120 B	Color (true)	101				0.128	
SM 2320 B-97	Total Alkalinity	99.1				0.791	
SM 2540 C-97	TDS					4.98	
SM 4500 F-C-97	Fluoride	99.3	99.5	99.5			0.0
SM 5310 B-00	Organic Carbon	98.8	97.7	98.4			0.587

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2072429, 2072432
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2072429, 2072432
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2072429, 2072432
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2072430, 2072433
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2072430, 2072433
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2072430, 2072433
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2072430, 2072433
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2072431, 2072434
SM 2120 B / E31780	True Color measured at 450 nm	2072429, 2072432
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2072429, 2072432
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2072429, 2072432
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2072429, 2072432
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2072429, 2072432
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2072430, 2072433

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	03/26/2019			03/26/2019 16:32	Adrian Shelby	2072429, 2072432
EPA 300.0 Rev. 2.1	03/26/2019			03/29/2019 06:59	Lipi Saha	2072429
	03/26/2019			03/29/2019 07:11	Lipi Saha	2072432
EPA 350.1 Rev. 2.0	03/26/2019			03/29/2019 11:23	Ping Hua	2072430
	03/26/2019			03/29/2019 11:24	Ping Hua	2072433
EPA 351.2 Rev. 2.0	03/26/2019	03/27/2019 13:30	Jhamieka S. Greenwood	03/29/2019 13:12	Joseph Suarez	2072430
	03/26/2019	03/27/2019 13:30	Jhamieka S. Greenwood	03/29/2019 13:14	Joseph Suarez	2072433
EPA 353.2 Rev. 2.0	03/26/2019			03/29/2019 11:08	Virginia P. Brown	2072430
	03/26/2019			03/29/2019 11:16	Virginia P. Brown	2072433
EPA 365.1 Rev. 2.0	03/26/2019	03/29/2019 12:25	Adrian Shelby	04/01/2019 16:33	Rosalyn Ballman	2072430
	03/26/2019	03/29/2019 12:25	Adrian Shelby	04/01/2019 16:34	Rosalyn Ballman	2072433
EPA 365.1 Rev. 2.0 dissolved	03/26/2019			03/26/2019 16:07	Jhamieka S. Greenwood	2072431
	03/26/2019			03/26/2019 16:08	Jhamieka S. Greenwood	2072434
SM 2120 B	03/26/2019			03/26/2019 16:08	Mariam Hanna	2072429
	03/26/2019			03/26/2019 16:09	Mariam Hanna	2072432
SM 2320 B-97	03/26/2019			04/04/2019 08:08	Dale L. Simmons	2072429
	03/26/2019			04/04/2019 08:19	Dale L. Simmons	2072432
SM 2540 C-97	03/26/2019			03/27/2019 14:03	Yijie Li	2072429, 2072432
SM 2540 D-97	03/26/2019			03/27/2019 14:03	Yijie Li	2072429, 2072432
SM 4500 F-C-97	03/26/2019			04/04/2019 08:08	Dale L. Simmons	2072429
	03/26/2019			04/04/2019 08:19	Dale L. Simmons	2072432
SM 5310 B-00	03/26/2019			03/27/2019 20:26	Julia Storbeck	2072430
	03/26/2019			03/27/2019 20:38	Julia Storbeck	2072433