

Chemical Analysis Report

NW-DIST-2019-12-13-01

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

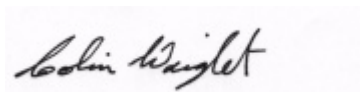
Event Description: **Lake Karick Run**
Request ID: **RQ-2019-12-02-59**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
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160 Government Center
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Certified by: Colin Wright, Program Administrator

Date Certified: 30-DEC-2019 09:11

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light-colored rectangular 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 Karick (Center)

Collection Date/Time: 12/12/2019 10:05

Field ID: G4NW0274

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143824	EPA 180.1 Rev. 2.0	Turbidity	4.6		NTU	P376187	
	EPA 300.0 Rev. 2.1	Chloride	2.5		mg Cl/L	P376406	
		Sulfate	0.70		mg SO4/L	P376408	
	SM 2120 B	Color (true)	34		PCU	P375987	
	SM 2320 B-97	Total Alkalinity	8.6		mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	15	I	mg/L	P376419	
	SM 2540 D-97	TSS	2	I	mg/L	P376359	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P376262	
2143825	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P376278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P375916	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.059		mg N/L	P375963	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P375927	
	SM 5310 B-00	Organic Carbon	4.7		mg C/L	P375979	
2143826	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375856	

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: Hurricane Creek below Hurricane Lake Road

Collection Date/Time: 12/12/2019 11:00

Field ID: G4NW0160

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143841	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P376186	
	EPA 300.0 Rev. 2.1	Chloride	3.7		mg Cl/L	P376406	
		Sulfate	2.8		mg SO4/L	P376408	
	SM 2120 B	Color (true)	20	A	PCU	P375988	
	SM 2320 B-97	Total Alkalinity	0.95	I	mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	21	I	mg/L	P376419	
	SM 2540 D-97	TSS	2	I	mg/L	P376359	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P376262	
2143842	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P376278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P375916	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P375966	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P375927	
	SM 5310 B-00	Organic Carbon	3.8		mg C/L	P375979	
2143843	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375856	

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: P376186

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376187

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376406

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375966

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

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: P375856

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

Reference Method: SM 2120 B
Batch ID: P375987

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P375988

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P376259

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

Reference Method: SM 2540 C-97
Batch ID: P376419

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376359

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P375979

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: P376406

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P376408

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P376278

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: P375916

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P375963

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P375966

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: P375927

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: P375856

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

Reference Method: SM 2120 B
 Batch ID: P375987

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.6		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P375988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.6		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P376259

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P375979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376406

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143349	Chloride	99.1		P	90 - 110
2144045	Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143349	Sulfate	99.4		P	90 - 110
2144045	Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143917	Ammonia-N	98.9	98.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143835	Kjeldahl Nitrogen	102	108	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143917	NO2NO3-N	97.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143842	NO2NO3-N	98.4	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143697	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143671	O-Phosphate-P	94.5	96.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143923	Fluoride	98.0	99.1	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P375979

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143902	Organic Carbon	94.4	94.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376186

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143829	Turbidity	1.27	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143999	Turbidity	1.40	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143349	Chloride	0.133	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143349	Sulfate	0.0434	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143917	Ammonia-N	0.539	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143835	Kjeldahl Nitrogen	4.12	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143917	NO2NO3-N	0.574	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143842	NO2NO3-N	0.491	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143697	Total-P	0.630	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143671	O-Phosphate-P	1.59	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P375987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143669	Color (true)	1.79	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P375988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143841	Color (true)	4.09	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P376259

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143923	Total Alkalinity	0.576	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P376419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143452	TDS	3.45	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143923	Fluoride	0.963	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P375979

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143902	Organic Carbon	0.117	Spike	P	0 - 20

Quality Assurance Report Precision

* 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: A96350

Included Lab Sample IDs: 2143826, 2143843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	97.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96387

Included Lab Sample IDs: 2143825, 2143842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A96393

Included Lab Sample IDs: 2143825, 2143842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	97.4	P/P	90 - 110
Organic Carbon	97.4	94.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96396

Included Lab Sample IDs: 2143825, 2143842

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

Reference Method: SM 2120 B

Run ID: A96397

Included Lab Sample IDs: 2143824, 2143841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.8	100	P/P	90 - 115
Color (true)	99.8	98.8	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96441

Included Lab Sample IDs: 2143825, 2143842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	102	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A96479

Included Lab Sample IDs: 2143824, 2143841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	102	P/P	95 - 105
Turbidity	100	100	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A96510

Included Lab Sample IDs: 2143824, 2143841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A96510

Included Lab Sample IDs: 2143824, 2143841

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A96515

Included Lab Sample IDs: 2143825, 2143842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	99.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96570

Included Lab Sample IDs: 2143824, 2143841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.9	97.0	P/P	90 - 110
Sulfate	97.8	97.9	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					1.27	
	Turbidity					1.40	
EPA 300.0 Rev. 2.1	Chloride	98.6	99.1	98.9		0.133	
	Sulfate	99.3	99.4	99.9		0.0434	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	98.9	98.2			0.539
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	102	108			4.12
EPA 353.2 Rev. 2.0	NO2NO3-N	96.0	97.0				0.574
	NO2NO3-N	100	98.4	98.8			0.491
EPA 365.1 Rev. 2.0	Total-P	105	105	106			0.630
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	94.5	96.2			1.59
SM 2120 B	Color (true)	99.6				1.79	
	Color (true)	98.6				4.09	
SM 2320 B-97	Total Alkalinity	103				0.576	
SM 2540 C-97	TDS					3.45	
SM 4500 F-C-97	Fluoride	98.8	98.0	99.1			0.963
SM 5310 B-00	Organic Carbon	94.3	94.4	94.6			0.117

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2143824, 2143841
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2143824, 2143841
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2143824, 2143841
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2143825, 2143842
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2143825, 2143842
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2143825, 2143842
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2143825, 2143842
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2143826, 2143843
SM 2120 B / E31780	True Color measured at 450 nm	2143824, 2143841
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2143824, 2143841
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2143824, 2143841
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2143824, 2143841
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2143824, 2143841
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2143825, 2143842

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	12/13/2019			12/13/2019 17:27	Yen Ta	2143824, 2143841
EPA 300.0 Rev. 2.1	12/13/2019			12/25/2019 01:24	Jhamieka S. Greenwood	2143824
	12/13/2019			12/25/2019 01:58	Jhamieka S. Greenwood	2143841
EPA 350.1 Rev. 2.0	12/13/2019			12/18/2019 12:45	Ping Hua	2143825
	12/13/2019			12/18/2019 12:51	Ping Hua	2143842
EPA 351.2 Rev. 2.0	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 16:16	Jhamieka S. Greenwood	2143825
	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 16:22	Jhamieka S. Greenwood	2143842
EPA 353.2 Rev. 2.0	12/13/2019			12/17/2019 10:30	Beverly Y. Sanders	2143825
	12/13/2019			12/17/2019 11:24	Beverly Y. Sanders	2143842
EPA 365.1 Rev. 2.0	12/13/2019	12/16/2019 14:17	Yen Ta	12/18/2019 15:50	Benjamin T. Nordmann	2143825
	12/13/2019	12/16/2019 14:17	Yen Ta	12/18/2019 15:52	Benjamin T. Nordmann	2143842
EPA 365.1 Rev. 2.0 dissolved	12/13/2019			12/13/2019 18:22	Samantha Davila	2143826
	12/13/2019			12/13/2019 18:24	Samantha Davila	2143843
SM 2120 B	12/13/2019			12/13/2019 18:34	Madeline Funaro	2143824
	12/13/2019			12/13/2019 18:40	Madeline Funaro	2143841
SM 2320 B-97	12/13/2019			12/19/2019 04:55	Dale L. Simmons	2143824
	12/13/2019			12/19/2019 05:58	Dale L. Simmons	2143841
SM 2540 C-97	12/13/2019			12/17/2019 16:36	Yijie Li	2143824, 2143841
SM 2540 D-97	12/13/2019			12/17/2019 16:36	Yijie Li	2143824, 2143841
SM 4500 F-C-97	12/13/2019			12/19/2019 04:55	Dale L. Simmons	2143824
	12/13/2019			12/19/2019 05:58	Dale L. Simmons	2143841
SM 5310 B-00	12/13/2019			12/17/2019 06:20	Madeline Funaro	2143825
	12/13/2019			12/17/2019 07:55	Madeline Funaro	2143842