

Chemical Analysis Report

CEN-DIST-2019-10-10-01

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

Event Description: **Bird x2 + HA / Faulk**
Request ID: **RQ-2019-10-14-43**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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3319 Maguire Blvd., Suite 232
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 29-OCT-2019 16:10

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: Bird Lake Ditches @ 75m east of FL 407

Collection Date/Time: 10/09/2019 11:06

Field ID: G3CE0014

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2126771	EPA 180.1 Rev. 2.0	Turbidity	4.6		NTU	P372279	
	EPA 300.0 Rev. 2.1	Chloride	79		mg Cl/L	P372760	
		Sulfate	43		mg SO4/L	P372764	
	SM 2120 B	Color (true)	27		PCU	P372309	
	SM 2320 B-97	Total Alkalinity	233	A	mg CaCO3/L	P372639	
	SM 2540 C-97	TDS	443		mg/L	P372891	
	SM 2540 D-97	TSS	2	U	mg/L	P372496	
	SM 4500 F-C-97	Fluoride	0.052	I	mg F/L	P372642	
2126773	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P372691	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P372341	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.095		mg N/L	P372440	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P372401	
	SM 5310 B-00	Organic Carbon	7.4		mg C/L	P372571	
2126775	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.062		mg P/L	P372287	

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: Bird Lake Ditch @ E side of S Fork Rd

Collection Date/Time: 10/09/2019 11:39

Field ID: G3CE0013

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2126772	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P372279	
	EPA 300.0 Rev. 2.1	Chloride	86		mg Cl/L	P372760	
		Sulfate	43		mg SO4/L	P372764	
	SM 2120 B	Color (true)	38		PCU	P372309	
	SM 2320 B-97	Total Alkalinity	233		mg CaCO3/L	P372639	
	SM 2540 C-97	TDS	468		mg/L	P372891	
	SM 2540 D-97	TSS	2	U	mg/L	P372496	
	SM 4500 F-C-97	Fluoride	0.068	I	mg F/L	P372642	
2126774	EPA 350.1 Rev. 2.0	Ammonia-N	0.092		mg N/L	P372562	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P372341	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P372440	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P372401	
	SM 5310 B-00	Organic Carbon	9.2		mg C/L	P372571	
2126776	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.069		mg P/L	P372287	

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: P372279

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372760

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372764

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372562

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372691

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372341

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372440

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372401

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372287

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: P372309

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P372639

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

Reference Method: SM 2540 C-97
Batch ID: P372891

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P372496

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P372642

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P372571

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: P372760

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372764

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372562

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372691

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372341

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372440

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372401

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.1		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372287

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.9		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P372309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.7		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P372639

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P372642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P372571

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372760

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126745	Chloride	99.1		P	90 - 110
2126954	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372764

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126745	Sulfate	99.6		P	90 - 110
2126954	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126887	Ammonia-N	94.6	92.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127020	Ammonia-N	99.0	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372341

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126773	Kjeldahl Nitrogen	96.6	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372440

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126645	NO2NO3-N	97.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126645	Total-P	97.8	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126646	O-Phosphate-P	95.7	98.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P372642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126771	Fluoride	94.5	93.4	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P372571

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126674	Organic Carbon	102	104	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372279

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126648	Turbidity	5.30	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372760

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126745	Chloride	0.640	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372764

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126745	Sulfate	0.826	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126887	Ammonia-N	1.44	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127020	Ammonia-N	1.74	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126773	Kjeldahl Nitrogen	3.01	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126645	NO2NO3-N	0.178	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126645	Total-P	0.192	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P372287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126646	O-Phosphate-P	2.28	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P372309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126673	Color (true)	0.829	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P372639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126771	Total Alkalinity	0.605	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P372891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126721	TDS	1.48	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P372642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126771	Fluoride	0.958	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P372571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126674	Organic Carbon	1.23	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A94862

Included Lab Sample IDs: 2126771, 2126772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A94863

Included Lab Sample IDs: 2126775, 2126776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.7	P/P	90 - 110
O-Phosphate-P	99.7	101	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A94874

Included Lab Sample IDs: 2126771, 2126772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.3	98.5	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A94918

Included Lab Sample IDs: 2126773, 2126774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A94931

Included Lab Sample IDs: 2126773, 2126774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.3	95.6	P/P	90 - 110
Kjeldahl Nitrogen	95.6	99.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94969

Included Lab Sample IDs: 2126773, 2126774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A94989

Included Lab Sample IDs: 2126774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	99.9	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A94999

Included Lab Sample IDs: 2126773, 2126774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A94999

Included Lab Sample IDs: 2126773, 2126774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	99.4	P/P	90 - 110
Organic Carbon	99.4	98.9	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95003

Included Lab Sample IDs: 2126771, 2126772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	101	100	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A95021

Included Lab Sample IDs: 2126771, 2126772

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

Reference Method: SM 4500 F-C-97

Run ID: A95021

Included Lab Sample IDs: 2126771, 2126772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.5	P/P	90 - 110
Fluoride	99.5	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95045

Included Lab Sample IDs: 2126773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	102	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					5.30	
EPA 300.0 Rev. 2.1	Chloride	100	99.1	100		0.640	
	Sulfate	100	99.6	102		0.826	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	94.6	92.5			1.44
	Ammonia-N	99.9	99.0	101			1.74
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.2	96.6	101			3.01
EPA 353.2 Rev. 2.0	NO2NO3-N	100	97.8				0.178
EPA 365.1 Rev. 2.0	Total-P	96.1	97.8	97.6			0.192
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.9	95.7	98.0			2.28
SM 2120 B	Color (true)	98.7				0.829	
SM 2320 B-97	Total Alkalinity	105				0.605	
SM 2540 C-97	TDS					1.48	
SM 4500 F-C-97	Fluoride	96.1	94.5	93.4			0.958
SM 5310 B-00	Organic Carbon	102	102	104			1.23

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2126771, 2126772
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2126771, 2126772
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2126771, 2126772
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2126773, 2126774
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2126773, 2126774
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2126773, 2126774
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2126773, 2126774
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2126775, 2126776
SM 2120 B / E31780	True Color measured at 450 nm	2126771, 2126772
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2126771, 2126772
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2126771, 2126772
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2126771, 2126772
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2126771, 2126772
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2126773, 2126774

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	10/10/2019			10/10/2019 14:53	Rosalyn Ballman	2126771, 2126772
EPA 300.0 Rev. 2.1	10/10/2019			10/17/2019 03:40	Jhamieka S. Greenwood	2126771
	10/10/2019			10/17/2019 03:52	Jhamieka S. Greenwood	2126772
EPA 350.1 Rev. 2.0	10/10/2019			10/15/2019 14:35	Ping Hua	2126774
	10/10/2019			10/17/2019 11:53	Ping Hua	2126773
EPA 351.2 Rev. 2.0	10/10/2019	10/11/2019 11:17	Sima Feizi	10/14/2019 16:52	Jhamieka S. Greenwood	2126773
	10/10/2019	10/11/2019 11:17	Sima Feizi	10/14/2019 17:12	Jhamieka S. Greenwood	2126774
EPA 353.2 Rev. 2.0	10/10/2019			10/14/2019 09:37	Beverly Y. Sanders	2126773
	10/10/2019			10/14/2019 09:38	Beverly Y. Sanders	2126774
EPA 365.1 Rev. 2.0	10/10/2019	10/14/2019 14:50	Lipi Saha	10/15/2019 12:36	Rosalyn Ballman	2126773
	10/10/2019	10/14/2019 14:50	Lipi Saha	10/15/2019 12:37	Rosalyn Ballman	2126774
EPA 365.1 Rev. 2.0 dissolved	10/10/2019			10/10/2019 16:38	Julia Storbeck	2126775
	10/10/2019			10/10/2019 16:47	Julia Storbeck	2126776
SM 2120 B	10/10/2019			10/10/2019 16:47	Madeline Funaro	2126771
	10/10/2019			10/10/2019 16:48	Madeline Funaro	2126772
SM 2320 B-97	10/10/2019			10/15/2019 07:04	Dale L. Simmons	2126771
	10/10/2019			10/15/2019 10:21	Dale L. Simmons	2126772
SM 2540 C-97	10/10/2019			10/11/2019 16:16	Rosalyn Ballman	2126771, 2126772
SM 2540 D-97	10/10/2019			10/11/2019 16:16	Rosalyn Ballman	2126771, 2126772
SM 4500 F-C-97	10/10/2019			10/15/2019 06:52	Dale L. Simmons	2126771
	10/10/2019			10/15/2019 10:21	Dale L. Simmons	2126772
SM 5310 B-00	10/10/2019			10/15/2019 21:08	Madeline Funaro	2126773
	10/10/2019			10/15/2019 21:53	Madeline Funaro	2126774