

Chemical Analysis Report

SO-DIST-2019-04-03-01

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

Event Description: **2019 SMP : HAs (Alligator & Hudson)**

Request ID: **RQ-2019-04-01-64**

Customer: **SO-DIST**

Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 24-APR-2019 16:15

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical 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: Alligator S@JonesLoopRd

Collection Date/Time: 04/02/2019 09:25

Field ID: G2SD0033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074697	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P361524	
	EPA 300.0 Rev. 2.1	Chloride	59		mg Cl/L	P361965	
		Sulfate	8.6		mg SO4/L	P361967	
	SM 2120 B	Color (true)	31	A	PCU	P361550	
	SM 2320 B-97	Total Alkalinity	102		mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	254		mg/L	P362129	
	SM 2540 D-97	TSS	2	I	mg/L	P362039	
	SM 4500 F-C-97	Fluoride	0.085	I	mg F/L	P362443	
2074699	EPA 350.1 Rev. 2.0	Ammonia-N	0.067		mg N/L	P361703	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P361754	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.078		mg N/L	P361627	
	EPA 365.1 Rev. 2.0	Total-P	0.036		mg P/L	P361767	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P361725	
2074701	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.021		mg P/L	P361530	

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: Drain to Hudson@ Shade

Collection Date/Time: 04/02/2019 12:40

Field ID: G3SD0134

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074698	EPA 180.1 Rev. 2.0	Turbidity	60		NTU	P361526	
	EPA 300.0 Rev. 2.1	Chloride	51		mg Cl/L	P361965	
		Sulfate	69		mg SO4/L	P361967	
	SM 2120 B	Color (true)	40	A	PCU	P361552	
	SM 2320 B-97	Total Alkalinity	125		mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	357		mg/L	P362130	
	SM 2540 D-97	TSS	76		mg/L	P362040	
	SM 4500 F-C-97	Fluoride	0.37		mg F/L	P362443	
2074700	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P361703	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P361754	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P361627	
	EPA 365.1 Rev. 2.0	Total-P	1.8		mg P/L	P361767	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P361725	
2074702	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P361530	

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: P361524

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361526

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361965

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361967

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361703

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361627

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361530

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: P361550

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P361552

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P361854

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

Reference Method: SM 2540 C-97
Batch ID: P362129

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P362130

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362039

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362040

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P361725

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: P361965

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361967

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361703

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361627

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

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: P361530

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.8		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P361550

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P361552

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: P361854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P361725

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361965

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074614	Chloride	95.9		P	90 - 110
2074784	Chloride	95.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361967

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074614	Sulfate	95.8		P	90 - 110
2074784	Sulfate	92.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074637	Ammonia-N	96.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074639	Kjeldahl Nitrogen	98.2	92.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074617	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074637	Total-P	103	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074570	O-Phosphate-P	93.5	95.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074564	Fluoride	96.3	95.8	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P361725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074637	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361524

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074620	Turbidity	1.63	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074859	Turbidity	1.95	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074614	Chloride	0.0284	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361967

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074614	Sulfate	0.166	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074637	Ammonia-N	3.86	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074639	Kjeldahl Nitrogen	3.80	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074617	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074637	Total-P	2.35	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074570	O-Phosphate-P	1.59	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P361550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074697	Color (true)	0.428	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P361552

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074698	Color (true)	2.40	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P361854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074374	Total Alkalinity	1.01	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P362129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074564	TDS	4.76	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P362130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074710	TDS	5.47	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074564	Fluoride	0.482	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P361725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074637	Organic Carbon	0.0365	Spike	P	0 - 20

Quality Assurance Report

Precision

* 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: EPA 180.1 Rev. 2.0

Run ID: A90416

Included Lab Sample IDs: 2074697, 2074698

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A90417

Included Lab Sample IDs: 2074701, 2074702

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.7	96.0	P/P	90 - 110
O-Phosphate-P	97.9	97.1	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A90429

Included Lab Sample IDs: 2074697

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: SM 2120 B

Run ID: A90430

Included Lab Sample IDs: 2074698

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.6		P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A90436

Included Lab Sample IDs: 2074699, 2074700

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A90502

Included Lab Sample IDs: 2074699, 2074700

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	104	105	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A90508

Included Lab Sample IDs: 2074699, 2074700

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A90538

Included Lab Sample IDs: 2074697, 2074698

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90545

Included Lab Sample IDs: 2074700

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90554

Included Lab Sample IDs: 2074699

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

Reference Method: SM 2320 B-97

Run ID: A90560

Included Lab Sample IDs: 2074697, 2074698

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A90592

Included Lab Sample IDs: 2074699, 2074700

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	99.3	P/P	90 - 110
Kjeldahl Nitrogen	99.3	105	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A90826

Included Lab Sample IDs: 2074697, 2074698

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	98.6	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					1.63	
	Turbidity					1.95	
EPA 300.0 Rev. 2.1	Chloride	101	95.9	95.2		0.0284	
	Sulfate	99.2	95.8	92.8		0.166	
EPA 350.1 Rev. 2.0	Ammonia-N	102	96.4	100			3.86
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	98.2	92.4			3.80
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	101	101			0.0
EPA 365.1 Rev. 2.0	Total-P	105	103	100			2.35
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8	93.5	95.0			1.59
SM 2120 B	Color (true)	102				0.428	
	Color (true)	101				2.40	
SM 2320 B-97	Total Alkalinity	101				1.01	
SM 2540 C-97	TDS					4.76	
	TDS					5.47	
SM 4500 F-C-97	Fluoride	97.3	96.3	95.8			0.482
SM 5310 B-00	Organic Carbon	103	101	101			0.0365

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2074697, 2074698
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2074697, 2074698
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2074697, 2074698
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2074699, 2074700
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2074699, 2074700
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2074699, 2074700
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2074699, 2074700
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2074701, 2074702
SM 2120 B / E31780	True Color measured at 450 nm	2074697, 2074698
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2074697, 2074698
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2074697, 2074698
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2074697, 2074698
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2074697, 2074698
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2074699, 2074700

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	04/03/2019			04/03/2019 16:46	Adrian Shelby	2074697, 2074698
EPA 300.0 Rev. 2.1	04/03/2019			04/10/2019 20:24	Lipi Saha	2074697
	04/03/2019			04/10/2019 20:36	Lipi Saha	2074698
EPA 350.1 Rev. 2.0	04/03/2019			04/04/2019 15:10	Ping Hua	2074699
	04/03/2019			04/04/2019 15:11	Ping Hua	2074700
EPA 351.2 Rev. 2.0	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 12:23	Joseph Suarez	2074699
	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 12:28	Joseph Suarez	2074700
EPA 353.2 Rev. 2.0	04/03/2019			04/04/2019 10:56	Beverly Y. Sanders	2074699
	04/03/2019			04/04/2019 10:57	Beverly Y. Sanders	2074700
EPA 365.1 Rev. 2.0	04/03/2019	04/08/2019 14:35	Sima Feizi	04/09/2019 13:20	Rosalyn Ballman	2074700
	04/03/2019	04/08/2019 14:35	Sima Feizi	04/09/2019 15:16	Rosalyn Ballman	2074699
EPA 365.1 Rev. 2.0 dissolved	04/03/2019			04/03/2019 18:27	Jhamieka S. Greenwood	2074701
	04/03/2019			04/03/2019 19:09	Jhamieka S. Greenwood	2074702
SM 2120 B	04/03/2019			04/03/2019 16:44	Mariam Hanna	2074697
	04/03/2019			04/03/2019 17:58	Mariam Hanna	2074698
SM 2320 B-97	04/03/2019			04/09/2019 19:28	Samantha Davila	2074697
	04/03/2019			04/09/2019 19:41	Samantha Davila	2074698
SM 2540 C-97	04/03/2019			04/05/2019 15:52	Yijie Li	2074697, 2074698
SM 2540 D-97	04/03/2019			04/05/2019 15:52	Yijie Li	2074697, 2074698
SM 4500 F-C-97	04/03/2019			04/18/2019 08:51	Samantha Davila	2074697
	04/03/2019			04/18/2019 08:55	Samantha Davila	2074698
SM 5310 B-00	04/03/2019			04/05/2019 15:58	Julia Storbeck	2074699
	04/03/2019			04/05/2019 18:06	Julia Storbeck	2074700