

Chemical Analysis Report

CEN-DIST-2019-07-19-01

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

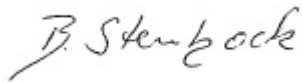
Event Description: **Bear Head / Bass/ Terrace / Whip**
Request ID: **RQ-2019-07-08-71**
Customer: **CEN-DIST**
Project ID: **SMP**

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Date Certified: 06-AUG-2019 19:27



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: Bear Head Lake @ Center

Collection Date/Time: 07/18/2019 11:14

Field ID: G4CE0126

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2104548	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P367643	
	EPA 300.0 Rev. 2.1	Chloride	16	A	mg Cl/L	P367756	
		Sulfate	13	A	mg SO4/L	P367758	
	SM 2120 B	Color (true)	26	A	PCU	P367620	
	SM 2320 B-97	Total Alkalinity	38		mg CaCO3/L	P367938	
	SM 2540 C-97	TDS	103		mg/L	P368115	
	SM 2540 D-97	TSS	3	I	mg/L	P367793	
	SM 4500 F-C-97	Fluoride	0.049	I	mg F/L	P367941	
2104551	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P368183	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P367891	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P367687	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P367748	
	SM 5310 B-00	Organic Carbon	9.9		mg C/L	P367727	
2104554	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P367639	

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 Bass @ Center of Lake

Collection Date/Time: 07/18/2019 12:01

Field ID: G4CE0147

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2104549	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P367643	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P367756	
		Sulfate	20		mg SO4/L	P367758	
	SM 2120 B	Color (true)	12		PCU	P367620	
	SM 2320 B-97	Total Alkalinity	44	A	mg CaCO3/L	P367938	
	SM 2540 C-97	TDS	120	A	mg/L	P368115	
	SM 2540 D-97	TSS	7	IA	mg/L	P367793	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P367941	
2104552	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P368183	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.85		mg N/L	P367892	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P367687	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P367748	
	SM 5310 B-00	Organic Carbon	5.4		mg C/L	P367727	
2104555	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P367639	

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 Terrace @ Center

Collection Date/Time: 07/18/2019 12:24

Field ID: G4CE0153

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2104550	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P367643	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P367756	
		Sulfate	25		mg SO4/L	P367758	
	SM 2120 B	Color (true)	9.3		PCU	P367620	
	SM 2320 B-97	Total Alkalinity	38		mg CaCO3/L	P367938	
	SM 2540 C-97	TDS	119		mg/L	P368115	
	SM 2540 D-97	TSS	9	I	mg/L	P367793	
	SM 4500 F-C-97	Fluoride	0.048	I	mg F/L	P367941	
2104553	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P368183	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P367892	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P367687	
	EPA 365.1 Rev. 2.0	Total-P	0.044		mg P/L	P367748	
	SM 5310 B-00	Organic Carbon	4.7		mg C/L	P367727	
2104556	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P367639	

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: P367643

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367756

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367758

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368183

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367891

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367892

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367687

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: P367748

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367639

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: P367620

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P367938

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

Reference Method: SM 2540 C-97
Batch ID: P368115

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P367793

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P367941

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P367727

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: P367756

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367758

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368183

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	108		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367891

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367892

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367687

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: P367748

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367639

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

Reference Method: SM 2120 B
Batch ID: P367620

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.7		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P367938

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

Reference Method: SM 4500 F-C-97
Batch ID: P367941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P367727

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367756

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104548	Chloride	102		P	90 - 110
2104625	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367758

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104548	Sulfate	102		P	90 - 110
2104625	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104551	Ammonia-N	97.5	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104520	Kjeldahl Nitrogen	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104553	Kjeldahl Nitrogen	93.6	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104542	NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104553	Total-P	106	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104522	O-Phosphate-P	97.1	98.9	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P367941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104549	Fluoride	104	104	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P367727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2104551	Organic Carbon	99.5	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P367643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104616	Turbidity	0.191	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367756

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104548	Chloride	2.53	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367758

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104548	Sulfate	1.78	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104551	Ammonia-N	0.817	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104520	Kjeldahl Nitrogen	0.265	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104553	Kjeldahl Nitrogen	5.62	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367687

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104542	NO2NO3-N	0.610	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104553	Total-P	2.26	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P367639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104522	O-Phosphate-P	1.84	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P367620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104548	Color (true)	3.45	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P367938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104549	Total Alkalinity	2.72	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P368115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104549	TDS	3.33	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P367941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104549	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P367727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2104551	Organic Carbon	0.636	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: EPA 365.1 Rev. 2.0 dissolved
Run ID: A92908
Included Lab Sample IDs: 2104554, 2104555, 2104556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.7	98.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A92909
Included Lab Sample IDs: 2104548, 2104549, 2104550

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A92937
Included Lab Sample IDs: 2104551, 2104552, 2104553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A92945
Included Lab Sample IDs: 2104551, 2104552, 2104553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	99.8	P/P	90 - 110
Organic Carbon	99.8	98.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A92954
Included Lab Sample IDs: 2104548, 2104549, 2104550

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A92981
Included Lab Sample IDs: 2104551, 2104552, 2104553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	98.8	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A93033
Included Lab Sample IDs: 2104548, 2104549, 2104550

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

Reference Method: SM 4500 F-C-97
Run ID: A93033
Included Lab Sample IDs: 2104548, 2104549, 2104550

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

Reference Method: SM 4500 F-C-97

Run ID: A93033

Included Lab Sample IDs: 2104548, 2104549, 2104550

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93054

Included Lab Sample IDs: 2104551, 2104552, 2104553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	109	P/P	90 - 110
Kjeldahl Nitrogen	107	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93145

Included Lab Sample IDs: 2104551, 2104552, 2104553

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					0.191	
EPA 300.0 Rev. 2.1	Chloride	102	102	102		2.53	
	Sulfate	103	102	103		1.78	
EPA 350.1 Rev. 2.0	Ammonia-N	108	97.5	96.6			0.817
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	101	100			0.265
	Kjeldahl Nitrogen	106	93.6	102			5.62
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	99.5			0.610
EPA 365.1 Rev. 2.0	Total-P	98.8	106	104			2.26
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	97.1	98.9			1.84
SM 2120 B	Color (true)	99.7				3.45	
SM 2320 B-97	Total Alkalinity	103				2.72	
SM 2540 C-97	TDS					3.33	
SM 4500 F-C-97	Fluoride	97.2	104	104			0.0
SM 5310 B-00	Organic Carbon	98.6	99.5	100			0.636

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2104548, 2104549, 2104550
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2104548, 2104549, 2104550
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2104548, 2104549, 2104550
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2104551, 2104552, 2104553
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2104551, 2104552, 2104553
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2104551, 2104552, 2104553
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2104551, 2104552, 2104553
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2104554, 2104555, 2104556
SM 2120 B / E31780	True Color measured at 450 nm	2104548, 2104549, 2104550
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2104548, 2104549, 2104550
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2104548, 2104549, 2104550
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2104548, 2104549, 2104550
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2104548, 2104549, 2104550
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2104551, 2104552, 2104553

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	07/19/2019			07/19/2019 17:01	Samantha Davila	2104548, 2104549, 2104550
EPA 300.0 Rev. 2.1	07/19/2019			07/22/2019 21:19	Jhamieka S. Greenwood	2104548
	07/19/2019			07/22/2019 22:31	Jhamieka S. Greenwood	2104549
	07/19/2019			07/22/2019 22:44	Jhamieka S. Greenwood	2104550
EPA 350.1 Rev. 2.0	07/19/2019			07/30/2019 18:06	Virginia P. Brown	2104551
	07/19/2019			07/30/2019 18:11	Virginia P. Brown	2104552
	07/19/2019			07/30/2019 18:12	Virginia P. Brown	2104553
EPA 351.2 Rev. 2.0	07/19/2019	07/25/2019 12:00	Adrian Shelby	07/26/2019 10:12	Joseph Suarez	2104551
	07/19/2019	07/25/2019 12:00	Adrian Shelby	07/26/2019 10:20	Joseph Suarez	2104552
	07/19/2019	07/25/2019 12:00	Adrian Shelby	07/26/2019 10:22	Joseph Suarez	2104553
EPA 353.2 Rev. 2.0	07/19/2019			07/22/2019 10:49	Beverly Y. Sanders	2104551
	07/19/2019			07/22/2019 10:50	Beverly Y. Sanders	2104552
	07/19/2019			07/22/2019 10:51	Beverly Y. Sanders	2104553
EPA 365.1 Rev. 2.0	07/19/2019	07/23/2019 11:20	Vijayalakshmi Reddy	07/24/2019 10:50	Lipi Saha	2104553
	07/19/2019	07/23/2019 11:20	Vijayalakshmi Reddy	07/24/2019 10:51	Lipi Saha	2104551
	07/19/2019	07/23/2019 11:20	Vijayalakshmi Reddy	07/24/2019 10:52	Lipi Saha	2104552
EPA 365.1 Rev. 2.0 dissolved	07/19/2019			07/19/2019 16:05	Jhamieka S. Greenwood	2104554
	07/19/2019			07/19/2019 16:06	Jhamieka S. Greenwood	2104555
	07/19/2019			07/19/2019 16:07	Jhamieka S. Greenwood	2104556
SM 2120 B	07/19/2019			07/19/2019 14:23	Blanca Fach	2104548
	07/19/2019			07/19/2019 14:24	Blanca Fach	2104549
	07/19/2019			07/19/2019 14:25	Blanca Fach	2104550
SM 2320 B-97	07/19/2019			07/25/2019 00:03	Dale L. Simmons	2104549
	07/19/2019			07/25/2019 00:24	Dale L. Simmons	2104548
	07/19/2019			07/25/2019 00:36	Dale L. Simmons	2104550
SM 2540 C-97	07/19/2019			07/22/2019 15:00	Sima Feizi	2104548, 2104549, 2104550
SM 2540 D-97	07/19/2019			07/22/2019 15:00	Sima Feizi	2104548, 2104549, 2104550
SM 4500 F-C-97	07/19/2019			07/24/2019 23:53	Dale L. Simmons	2104549
	07/19/2019			07/25/2019 00:24	Dale L. Simmons	2104548
	07/19/2019			07/25/2019 00:36	Dale L. Simmons	2104550
SM 5310 B-00	07/19/2019			07/22/2019 22:33	Madeline Funaro	2104551
	07/19/2019			07/23/2019 02:51	Madeline Funaro	2104552
	07/19/2019			07/23/2019 03:03	Madeline Funaro	2104553