Chemical Analysis Report

CEN-DIST-2019-11-01-02

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

Event Description: **Bid + HA / Faulk**
Request ID: **RQ-2019-10-07-65**
Customer: **CEN-DIST**
Project ID: **SMP**

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Date Certified: 19-NOV-2019 14:50

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: Faulk Canal @ 50m upstream of Fiske Blvd **Collection Date/Time: 10/31/2019 09:50**

Field ID: G3CE0016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2133043	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P373603	
	EPA 300.0 Rev. 2.1	Chloride	220		mg Cl/L	P374076	
		Sulfate	58		mg SO4/L	P374081	
	SM 2120 B	Color (true)	93		PCU	P373614	
	SM 2320 B-97	Total Alkalinity	75		mg CaCO3/L	P374097	
	SM 2540 C-97	TDS	521		mg/L	P374056	
	SM 2540 D-97	TSS	3	I	mg/L	P374027	
	SM 4500 F-C-97	Fluoride	0.071	I	mg F/L	P374099	
2133045	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P373780	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P373852	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.025		mg N/L	P373629	
	EPA 365.1 Rev. 2.0	Total-P	0.044		mg P/L	P373790	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P373993	
2133047	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P373623	

Sample Location: SJR @ Power line Crossing **Collection Date/Time: 10/31/2019 10:45**

Field ID: G3CE0015 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2133044	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P373603	
	EPA 300.0 Rev. 2.1	Chloride	150		mg Cl/L	P374076	
		Sulfate	29		mg SO4/L	P374081	
	SM 2120 B	Color (true)	260		PCU	P373614	
	SM 2320 B-97	Total Alkalinity	68		mg CaCO3/L	P374097	
	SM 2540 C-97	TDS	452		mg/L	P374056	
	SM 2540 D-97	TSS	6	I	mg/L	P374027	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P374099	
2133046	EPA 350.1 Rev. 2.0	Ammonia-N	0.061		mg N/L	P373781	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P373852	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P373630	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P373790	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P373993	
2133048	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.081		mg P/L	P373623	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373603

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374076

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374081

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373780

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373781

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373852

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373629

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373630

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373790

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: P373623

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

Reference Method: SM 2120 B
Batch ID: P373614

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P374097

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

Reference Method: SM 2540 C-97
Batch ID: P374056

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P374027

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P374099

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P373993

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: P374076

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374081

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373780

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373781

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.3		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373629

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373630

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: P373790

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373623

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P373614

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.1		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P374097

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P374099

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P373993

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132954	Chloride	97.8		P	90 - 110
2133077	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374081

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132954	Sulfate	99.2		P	90 - 110
2133077	Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133024	Ammonia-N	99.5	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373781

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133086	Ammonia-N	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133004	Kjeldahl Nitrogen	94.4	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132959	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373630

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133062	NO2NO3-N	97.0	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133025	Total-P	103	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373623

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133006	O-Phosphate-P	95.4	96.2	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P374099

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133214	Fluoride	100	100	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P373993

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2133065	Organic Carbon	92.8	92.0	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133038	Turbidity	1.56	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132954	Chloride	0.398	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P374081

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132954	Sulfate	0.461	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133024	Ammonia-N	0.653	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133086	Ammonia-N	0.707	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133004	Kjeldahl Nitrogen	2.66	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132959	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373630

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133062	NO2NO3-N	0.382	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133025	Total-P	4.77	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133006	O-Phosphate-P	0.780	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P373614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133002	Color (true)	0.274	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P374097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133214	Total Alkalinity	0.0892	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P374056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132946	TDS	3.28	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P374027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132946	TSS	7.41	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P374099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133214	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P373993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2133065	Organic Carbon	0.421	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 180.1 Rev. 2.0
Run ID: A95414
Included Lab Sample IDs: 2133043, 2133044

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

Reference Method: SM 2120 B
Run ID: A95426
Included Lab Sample IDs: 2133043, 2133044

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 115
Color (true)	99.8	102	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A95427
Included Lab Sample IDs: 2133047, 2133048

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A95429
Included Lab Sample IDs: 2133045, 2133046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A95511
Included Lab Sample IDs: 2133043, 2133044

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A95516
Included Lab Sample IDs: 2133045, 2133046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	101	P/P	90 - 110
Ammonia-N	101	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A95552
Included Lab Sample IDs: 2133046

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A95555
Included Lab Sample IDs: 2133045

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A95591
Included Lab Sample IDs: 2133045, 2133046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.3	98.1	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A95618
Included Lab Sample IDs: 2133045, 2133046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.0	92.4	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A95676
Included Lab Sample IDs: 2133043, 2133044

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

Reference Method: SM 4500 F-C-97
Run ID: A95676
Included Lab Sample IDs: 2133043, 2133044

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	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		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					1.56	
EPA 300.0 Rev. 2.1	Chloride	100	97.8	100		0.398	
	Sulfate	100	99.2	99.7		0.461	
EPA 350.1 Rev. 2.0	Ammonia-N	101	99.5	100			0.653
	Ammonia-N	101	103	104			0.707
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.3	94.4	98.1			2.66
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	100	100			0.499
	NO2NO3-N	100	97.0	97.4			0.382
EPA 365.1 Rev. 2.0	Total-P	100	103	97.6			4.77
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7	95.4	96.2			0.780
SM 2120 B	Color (true)	99.1				0.274	
SM 2320 B-97	Total Alkalinity	101				0.0892	
SM 2540 C-97	TDS					3.28	
SM 2540 D-97	TSS					7.41	
SM 4500 F-C-97	Fluoride	98.1	100	100			0.0
SM 5310 B-00	Organic Carbon	99.8	92.8	92.0			0.421

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2133043, 2133044
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2133043, 2133044
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2133043, 2133044
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2133045, 2133046
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2133045, 2133046
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2133045, 2133046
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2133045, 2133046
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2133047, 2133048
SM 2120 B / E31780	True Color measured at 450 nm	2133043, 2133044
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2133043, 2133044
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2133043, 2133044
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2133043, 2133044
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2133043, 2133044
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2133045, 2133046

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	11/01/2019			11/01/2019 17:05	Rosalyn Ballman	2133043, 2133044
EPA 300.0 Rev. 2.1	11/01/2019			11/07/2019 11:59	Jhamieka S. Greenwood	2133043
	11/01/2019			11/07/2019 12:11	Jhamieka S. Greenwood	2133044
EPA 350.1 Rev. 2.0	11/01/2019			11/04/2019 13:12	Ping Hua	2133045
	11/01/2019			11/04/2019 13:30	Ping Hua	2133046
EPA 351.2 Rev. 2.0	11/01/2019	11/07/2019 12:07	Sima Feizi	11/08/2019 12:52	Virginia P. Brown	2133045
	11/01/2019	11/07/2019 12:07	Sima Feizi	11/08/2019 12:54	Virginia P. Brown	2133046
EPA 353.2 Rev. 2.0	11/01/2019			11/04/2019 09:51	Beverly Y. Sanders	2133045
	11/01/2019			11/04/2019 10:05	Beverly Y. Sanders	2133046
EPA 365.1 Rev. 2.0	11/01/2019	11/06/2019 15:02	Yen Ta	11/07/2019 11:59	Benjamin T. Nordmann	2133046
	11/01/2019	11/06/2019 15:02	Yen Ta	11/07/2019 14:16	Benjamin T. Nordmann	2133045
EPA 365.1 Rev. 2.0 dissolved	11/01/2019			11/01/2019 17:00	Samantha Davila	2133047
	11/01/2019			11/01/2019 17:07	Samantha Davila	2133048
SM 2120 B	11/01/2019			11/01/2019 17:26	Madeline Funaro	2133043
	11/01/2019			11/01/2019 17:56	Madeline Funaro	2133044
SM 2320 B-97	11/01/2019			11/13/2019 01:47	Dale L. Simmons	2133043
	11/01/2019			11/13/2019 01:59	Dale L. Simmons	2133044
SM 2540 C-97	11/01/2019			11/06/2019 14:36	Yijie Li	2133043, 2133044
SM 2540 D-97	11/01/2019			11/06/2019 14:36	Yijie Li	2133043, 2133044
SM 4500 F-C-97	11/01/2019			11/13/2019 01:47	Dale L. Simmons	2133043
	11/01/2019			11/13/2019 01:59	Dale L. Simmons	2133044
SM 5310 B-00	11/01/2019			11/08/2019 04:05	Madeline Funaro	2133045
	11/01/2019			11/08/2019 04:23	Madeline Funaro	2133046