Chemical Analysis Report

NW-DIST-2019-01-24-01

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

Event Description: **Navarre Run**
Request ID: **RQ-2019-01-14-16**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: cheryl Bunch

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 11-FEB-2019 15:41

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: WILLIAMS CREEK BELOW FRANKFORT AVENUE **Collection Date/Time: 01/22/2019 11:35**

Field ID: G4NW0198 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2056532	EPA 180.1 Rev. 2.0	Turbidity	4.0		NTU	P357796	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P358034	
		Sulfate	4.8		mg SO4/L	P358035	
	SM 2120 B	Color (true)	110	Q	PCU	P357803	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P358237	
	SM 2540 C-97	TDS	52		mg/L	P358118	
	SM 2540 D-97	TSS	2	U	mg/L	P357936	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P358241	
2056534	EPA 350.1 Rev. 2.0	Ammonia-N	0.054		mg N/L	P357945	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35		mg N/L	P358151	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P357914	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P357930	
	SM 5310 B-00	Organic Carbon	9.8		mg C/L	P357910	
2056536	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	UQ	mg P/L	P357800	

Ref. Method and Comment:
SM 2120 B: The sample expired upon receipt.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample expired upon receipt.

Sample Location: TOM KING CREEK **Collection Date/Time: 01/22/2019 12:05**

Field ID: G4NW0193 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2056533	EPA 180.1 Rev. 2.0	Turbidity	6.2	A	NTU	P357796	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P358034	
		Sulfate	8.0		mg SO4/L	P358035	
	SM 2120 B	Color (true)	68	Q	PCU	P357803	
	SM 2320 B-97	Total Alkalinity	6.0		mg CaCO3/L	P358237	
	SM 2540 C-97	TDS	66	AJ	mg/L	P358125	RPD
	SM 2540 D-97	TSS	2	U	mg/L	P357936	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P358241	
2056535	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P357945	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30		mg N/L	P357990	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.62		mg N/L	P357914	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P357930	
	SM 5310 B-00	Organic Carbon	6.4		mg C/L	P357910	
2056537	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	IQ	mg P/L	P357800	

Ref. Method and Comment:
SM 2120 B: The sample expired upon receipt.
SM 2540 C-97: Refer to the narrative for an explanation of QC Codes.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample expired upon receipt.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P357796

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358034

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358035

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P357945

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P357990

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P357914

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P357930

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P357800

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: P357803

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P358237

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

Reference Method: SM 2540 C-97
Batch ID: P358118

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P358125

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P357936

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P358241

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P357910

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: P358034

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358035

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P357945

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: P357990

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P357914

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: P357930

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P357800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.7		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P357803

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: P358237

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

Reference Method: SM 4500 F-C-97
Batch ID: P358241

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.7		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P357910

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358034

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056361	Chloride	97.8		P	90 - 110
2056423	Chloride	94.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056361	Sulfate	100		P	90 - 110
2056423	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P357945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056556	Ammonia-N	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P357990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056557	Kjeldahl Nitrogen	106	110	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056426	Kjeldahl Nitrogen	113	111	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P357914

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056534	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P357930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056456	Total-P	101	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P357800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056558	O-Phosphate-P	95.5	97.1	P/P	90 - 110

Reference Method: SM 5310 B-00
Batch ID: P357910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2056386	Organic Carbon	97.0		P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P357796

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056533	Turbidity	1.62	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056361	Chloride	1.18	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P358035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056361	Sulfate	1.63	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P357945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056556	Ammonia-N	1.61	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P357990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056557	Kjeldahl Nitrogen	3.95	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056426	Kjeldahl Nitrogen	1.73	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P357914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056534	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P357930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056456	Total-P	2.04	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P357800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056558	O-Phosphate-P	1.66	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P357803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056455	Color (true)	0.147	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P358237

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056730	Total Alkalinity	0.448	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P358118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056469	TDS	1.54	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P358125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056533	TDS	10.7	Sample	F	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P358241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056730	Fluoride	0.477	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P357910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2056386	Organic Carbon	0.626	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 180.1 Rev. 2.0
Run ID: A89003
Included Lab Sample IDs: 2056532, 2056533

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A89004
Included Lab Sample IDs: 2056536, 2056537

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	98.3	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A89005
Included Lab Sample IDs: 2056532, 2056533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115

Reference Method: SM 5310 B-00
Run ID: A89043
Included Lab Sample IDs: 2056534, 2056535

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A89046
Included Lab Sample IDs: 2056534, 2056535

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A89059
Included Lab Sample IDs: 2056534, 2056535

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A89076
Included Lab Sample IDs: 2056534, 2056535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A89089
Included Lab Sample IDs: 2056532, 2056533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	103	P/P	90 - 110
Sulfate	105	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A89103
Included Lab Sample IDs: 2056535

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

Reference Method: SM 2320 B-97
Run ID: A89154
Included Lab Sample IDs: 2056532, 2056533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.8	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A89154
Included Lab Sample IDs: 2056532, 2056533

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A89169
Included Lab Sample IDs: 2056534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	100	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					1.62	
EPA 300.0 Rev. 2.1	Chloride	101	97.8	94.2		1.18	
	Sulfate	102	100	100		1.63	
EPA 350.1 Rev. 2.0	Ammonia-N	101	103	101			1.61
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	106	110			3.95
	Kjeldahl Nitrogen	105	113	111			1.73
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	97.2	101	97.8			2.04
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.7	95.5	97.1			1.66
SM 2120 B	Color (true)	101				0.147	
SM 2320 B-97	Total Alkalinity	101				0.448	
SM 2540 C-97	TDS					1.54	
	TDS					10.7	
SM 4500 F-C-97	Fluoride	96.7					0.477
SM 5310 B-00	Organic Carbon	100	97.0				0.626

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2056532, 2056533
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2056532, 2056533
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2056532, 2056533
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2056534, 2056535
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2056534, 2056535
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2056534, 2056535
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2056534, 2056535
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2056536, 2056537
SM 2120 B / E31780	True Color measured at 450 nm	2056532, 2056533
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2056532, 2056533
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2056532, 2056533
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2056532, 2056533
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2056532, 2056533
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2056534, 2056535

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	01/24/2019			01/24/2019 11:26	Megan Treadwell	2056532
	01/24/2019			01/24/2019 11:30	Megan Treadwell	2056533
EPA 300.0 Rev. 2.1	01/24/2019			01/25/2019 22:17	Lipi Saha	2056532
	01/24/2019			01/25/2019 22:29	Lipi Saha	2056533
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	01/24/2019			01/28/2019 12:35	Ping Hua	2056535
EPA 351.2 Rev. 2.0	01/24/2019	01/29/2019 12:30	Adrian Shelby	01/30/2019 14:30	Joseph Suarez	2056535
	01/24/2019	02/01/2019 13:15	Adrian Shelby	02/04/2019 11:43	Joseph Suarez	2056534
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	01/24/2019			01/28/2019 09:26	Beverly Y. Sanders	2056535
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	01/24/2019	01/28/2019 15:30	Adrian Shelby	01/29/2019 15:59	Julia Storbeck	2056535
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	01/24/2019			01/24/2019 14:58	Chelsea Hernandez	2056533
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	01/24/2019			02/02/2019 12:46	Dale L. Simmons	2056533
SM 2540 C-97	01/24/2019			01/25/2019 15:45	Mariam Hanna	2056532
	01/24/2019			01/28/2019 18:15	Mariam Hanna	2056533
SM 2540 D-97	01/24/2019			01/25/2019 15:45	Mariam Hanna	2056532, 2056533
SM 4500 F-C-97	01/24/2019			02/02/2019 12:32	Dale L. Simmons	2056532
	01/24/2019			02/02/2019 12:46	Dale L. Simmons	2056533
SM 5310 B-00	01/24/2019			01/25/2019 18:49	Megan Treadwell	2056534
	01/24/2019			01/25/2019 19:01	Megan Treadwell	2056535