Chemical Analysis Report

NE-DIST-2017-06-01-02

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

Event Description: **UEC & LSJR Biology**
Request ID: **RQ-2017-05-29-10**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
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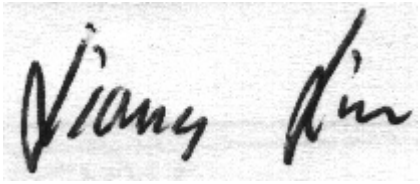
Date Certified: 26-JUN-2017 09:45



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 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: DEEP CR. E. OF HUB BAILEY RD. **Collection Date/Time: 05/31/2017 10:05**

Field ID: G2NE000305312017 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1902844	EPA 180.1 Rev. 2.0	Turbidity	4.4		NTU	P326118	
	EPA 300.0 Rev. 2.1	Chloride	670		mg Cl/L	P326786	
		Sulfate	540		mg SO4/L	P326789	
	SM 2120 B	Color (true)	26		PCU	P326233	
	SM 2320 B-97	Total Alkalinity	104		mg CaCO3/L	P326248	
	SM 2540 C-97	TDS	1.98E+03		mg/L	P326996	
	SM 2540 D-97	TSS	12		mg/L	P326742	
	SM 4500 F-C-97	Fluoride	0.60		mg F/L	P326418	
1902846	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P326130	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P326195	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P326154	
	EPA 365.1 Rev. 2.0	Total-P	0.40		mg P/L	P326199	
	SM 5310 B-00	Organic Carbon	5.3		mg C/L	P326191	
1902848	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.28		mg P/L	P326147	

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: DEEP TRIB GEORGE MILLER **Collection Date/Time: 05/31/2017 12:05**

Field ID: G2NE0867 05312017 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1902845	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P326118	
	EPA 300.0 Rev. 2.1	Chloride	650		mg Cl/L	P326787	
		Sulfate	430		mg SO4/L	P326790	
	SM 2120 B	Color (true)	19		PCU	P326233	
	SM 2320 B-97	Total Alkalinity	95		mg CaCO3/L	P326248	
	SM 2540 C-97	TDS	1.75E+03		mg/L	P326996	
	SM 2540 D-97	TSS	7	I	mg/L	P326742	
	SM 4500 F-C-97	Fluoride	0.57		mg F/L	P326418	
1902847	EPA 350.1 Rev. 2.0	Ammonia-N	0.26		mg N/L	P326130	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P326195	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.42		mg N/L	P326154	
	EPA 365.1 Rev. 2.0	Total-P	0.47		mg P/L	P326199	
	SM 5310 B-00	Organic Carbon	6.1		mg C/L	P326191	
1902849	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.32		mg P/L	P326147	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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: P326118

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P326118

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326786

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326787

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326789

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326790

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326130

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326195

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326154

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326199

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: P326147

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

Reference Method: SM 2120 B
Batch ID: P326233

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P326248

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

Reference Method: SM 2540 C-97
Batch ID: P326996

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P326742

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P326418

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P326191

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: P326786

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326787

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326787

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326789

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326790

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326130

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326195

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326154

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326199

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326147

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.3		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P326248

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P326418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P326191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902601	Chloride	97.9		P	90 - 110
1902602	Chloride	99.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326787

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902675	Chloride	101		P	90 - 110
1902867	Chloride	96.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902601	Sulfate	94.5		P	90 - 110
1902602	Sulfate	97.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902675	Sulfate	98.2		P	90 - 110
1902867	Sulfate	96.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326130

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902605	Ammonia-N	109	109	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902847	Kjeldahl Nitrogen	101	98.7	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326154

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902846	NO2NO3-N	108	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902964	Total-P	97.2	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902743	O-Phosphate-P	96.7	96.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P326418

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902601	Fluoride	100	102	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P326191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1902538	Organic Carbon	97.8	97.8	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P326118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902734	Turbidity	6.64	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902601	Chloride	0.796	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902675	Chloride	0.908	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P326789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902601	Sulfate	0.830	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902605	Ammonia-N	0.116	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902847	Kjeldahl Nitrogen	1.48	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326154

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902846	NO2NO3-N	1.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902964	Total-P	0.424	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902743	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P326233

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902811	Color (true)	0.196	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P326248

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902601	Total Alkalinity	0.547	Sample	P	0 - 4.8

Quality Assurance Report
Precision

Reference Method: SM 2540 C-97
Batch ID: P326996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902963	TDS	0.491	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P326418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902601	Fluoride	1.47	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P326191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1902538	Organic Carbon	0.0511	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: A76814
Included Lab Sample IDs: 1902844, 1902845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	102	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A76815
Included Lab Sample IDs: 1902846, 1902847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	103	P/P	90 - 110
Ammonia-N	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A76820
Included Lab Sample IDs: 1902848, 1902849

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.7	P/P	90 - 110
O-Phosphate-P	99.6	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76822
Included Lab Sample IDs: 1902846, 1902847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76822
Included Lab Sample IDs: 1902846, 1902847

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

Reference Method: SM 5310 B-00
Run ID: A76846
Included Lab Sample IDs: 1902846, 1902847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	97.2	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A76865
Included Lab Sample IDs: 1902844, 1902845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	104	P/P	85 - 115

Reference Method: SM 2320 B-97
Run ID: A76873
Included Lab Sample IDs: 1902844, 1902845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A76898
Included Lab Sample IDs: 1902846, 1902847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	90.3	92.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76937
Included Lab Sample IDs: 1902846, 1902847

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

Reference Method: SM 4500 F-C-97
Run ID: A76939
Included Lab Sample IDs: 1902844, 1902845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A77076
Included Lab Sample IDs: 1902844, 1902845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	98.6	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A77076
Included Lab Sample IDs: 1902844, 1902845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.7	102	P/P	90 - 110
Sulfate	105	103	P/P	90 - 110
Sulfate	108	99.9	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					6.64	
EPA 300.0 Rev. 2.1	Chloride	101	97.9	99.8		0.796	
	Chloride	99.5	101	96.3		0.908	
	Sulfate	99.5	94.5	97.6		0.830	
	Sulfate	98.9	98.2	96.6			
EPA 350.1 Rev. 2.0	Ammonia-N	105	109	109			0.116
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.7	101	98.7			1.48
EPA 353.2 Rev. 2.0	NO2NO3-N	104	108	106			1.06
EPA 365.1 Rev. 2.0	Total-P	101	97.2	97.6			0.424
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.3	96.7	96.7			0.0
SM 2120 B	Color (true)					0.196	
SM 2320 B-97	Total Alkalinity	103				0.547	
SM 2540 C-97	TDS					0.491	
SM 4500 F-C-97	Fluoride	100	100	102			1.47
SM 5310 B-00	Organic Carbon	96.4	97.8	97.8			0.0511

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1902844, 1902845
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1902844, 1902845
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1902844, 1902845
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1902846, 1902847
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1902846, 1902847
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1902846, 1902847
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1902846, 1902847
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1902848, 1902849
SM 2120 B / E31780	True Color measured at 450 nm	1902844, 1902845
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1902844, 1902845
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1902844, 1902845

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1902844, 1902845
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1902844, 1902845
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1902846, 1902847

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	06/01/2017			06/01/2017 16:02	Sima Feizi	1902844, 1902845
EPA 300.0 Rev. 2.1	06/01/2017			06/13/2017	Julia Storbeck	1902844, 1902845
EPA 350.1 Rev. 2.0	06/01/2017			06/01/2017	Julie Michelle Frank	1902846, 1902847
EPA 351.2 Rev. 2.0	06/01/2017	06/05/2017	Adrian Shelby	06/06/2017	Joseph Suarez	1902846, 1902847
EPA 353.2 Rev. 2.0	06/01/2017			06/02/2017	Beverly Y. Sanders	1902846, 1902847
EPA 365.1 Rev. 2.0	06/01/2017	06/05/2017	Vijayalakshmi Reddy	06/06/2017	Lipi Saha	1902846, 1902847
EPA 365.1 Rev. 2.0 dissolved	06/01/2017			06/01/2017 16:20	Anthony C. Onicha	1902849
	06/01/2017			06/01/2017 16:54	Anthony C. Onicha	1902848
SM 2120 B	06/01/2017			06/01/2017 16:16	Tanya Welborn	1902844
	06/01/2017			06/01/2017 16:17	Tanya Welborn	1902845
SM 2320 B-97	06/01/2017			06/03/2017	Dale L. Simmons	1902844, 1902845
SM 2540 C-97	06/01/2017			06/05/2017	Sima Feizi	1902844, 1902845
SM 2540 D-97	06/01/2017			06/05/2017	Sima Feizi	1902844, 1902845
SM 4500 F-C-97	06/01/2017			06/08/2017	Dale L. Simmons	1902844, 1902845
SM 5310 B-00	06/01/2017			06/02/2017	Julie Michelle Frank	1902846, 1902847