

Chemical Analysis Report

NE-DIST-2017-06-21-02

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

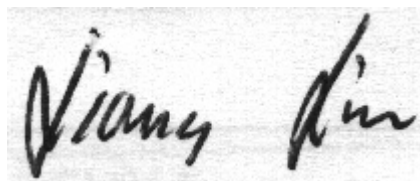
Event Description: **UEC South**
Request ID: **RQ-2017-06-19-70**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 11-JUL-2017 13:15

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

Case Narrative

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

Results for the following analytical group are included in this report: Nutrients.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited 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: Red House Branch @ Heffron Rd

Collection Date/Time: 06/20/2017 12:50

Field ID: G5NE0095 06222016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1907880	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P327255	
	EPA 300.0 Rev. 2.1	Chloride	86		mg Cl/L	P327407	
		Sulfate	41		mg SO4/L	P327410	
	SM 2120 B	Color (true)	55	A	PCU	P327259	
	SM 2320 B-97	Total Alkalinity	182		mg CaCO3/L	P327510	
	SM 2540 C-97	TDS	418		mg/L	P327625	
	SM 2540 D-97	TSS	2	U	mg/L	P327827	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P327512	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P327367	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P327343	
1907882	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P327475	
	EPA 365.1 Rev. 2.0	Total-P	0.061		mg P/L	P327398	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P327458	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.046		mg P/L	P327264	
	dissolved						

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.

Sample Location: Moses Creek @ US1

Collection Date/Time: 06/20/2017 13:25

Field ID: G5NE0069 06222017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1907881	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P327255	
	EPA 300.0 Rev. 2.1	Chloride	77		mg Cl/L	P327407	
		Sulfate	27		mg SO4/L	P327410	
	SM 2120 B	Color (true)	120		PCU	P327259	
	SM 2320 B-97	Total Alkalinity	141		mg CaCO3/L	P327511	
	SM 2540 C-97	TDS	361		mg/L	P327625	
	SM 2540 D-97	TSS	2	I	mg/L	P327827	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P327515	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P327367	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P327343	
1907883	EPA 353.2 Rev. 2.0	NO2NO3-N	0.052		mg N/L	P327475	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P327398	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P327587	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.10		mg P/L	P327264	
	dissolved						

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.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P327255

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327407

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327410

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327367

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327343

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327475

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327398

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327264

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

Reference Method: SM 2120 B
Batch ID: P327259

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P327510

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P327511

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

Reference Method: SM 2540 C-97
Batch ID: P327625

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327827

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P327512

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P327458

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: SM 5310 B-00
Batch ID: P327587

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: P327407

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327410

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327410

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327367

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327343

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: P327475

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327398

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327264

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

Reference Method: SM 2320 B-97
Batch ID: P327510

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

Reference Method: SM 2320 B-97
Batch ID: P327511

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

Reference Method: SM 4500 F-C-97
Batch ID: P327512

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	93.5		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P327458

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P327587

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327407

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907789	Chloride	95.5		P	90 - 110
1908023	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907789	Sulfate	94.0		P	90 - 110
1908023	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907861	Ammonia-N	100	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908026	Kjeldahl Nitrogen	97.1	95.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327475

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907858	NO2NO3-N	102		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P327398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907882	Total-P	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P327264

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907864	O-Phosphate-P	92.8	94.9	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Batch ID: P327512

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908499	Fluoride	98.8	98.8	P/P	91 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P327515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908024	Fluoride	95.8	97.6	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P327458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907492	Organic Carbon	92.2	94.1	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P327587

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1907883	Organic Carbon	93.0	93.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P327255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907690	Turbidity	0.500	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P327407

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908023	Chloride	1.18	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907861	Ammonia-N	0.567	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908026	Kjeldahl Nitrogen	0.937	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327475

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907858	NO2NO3-N	0.903	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907882	Total-P	0.819	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327264

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907864	O-Phosphate-P	2.05	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P327259

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907880	Color (true)	1.97	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P327510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908499	Total Alkalinity	0.620	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P327511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908024	Total Alkalinity	2.49	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P327625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907643	TDS	5.11	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P327827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907643	TSS	6.06	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P327512

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908499	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P327515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908024	Fluoride	1.52	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P327458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907492	Organic Carbon	1.28	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P327587

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1907883	Organic Carbon	0.225	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 300.0 Rev. 2.1
Run ID: A77183
Included Lab Sample IDs: 1907880, 1907881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.0	105	P/P	90 - 110
Sulfate	98.6	99.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A77249
Included Lab Sample IDs: 1907880, 1907881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A77251
Included Lab Sample IDs: 1907880, 1907881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	98.6	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A77252
Included Lab Sample IDs: 1907884, 1907885

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A77289
Included Lab Sample IDs: 1907882, 1907883

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

Reference Method: SM 5310 B-00
Run ID: A77331
Included Lab Sample IDs: 1907882

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	92.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A77334
Included Lab Sample IDs: 1907882, 1907883

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.9	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A77340
Included Lab Sample IDs: 1907882, 1907883

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	102	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A77355
Included Lab Sample IDs: 1907880, 1907881

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A77355

Included Lab Sample IDs: 1907880, 1907881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.6	100	P/P	90 - 110
Fluoride	98.5	96.6	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A77379

Included Lab Sample IDs: 1907883

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.4	94.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77404

Included Lab Sample IDs: 1907882, 1907883

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.9	97.7	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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				0.500	
EPA 300.0 Rev. 2.1	Chloride	103	104 95.5		1.18	
	Sulfate	102	101 94.0			
EPA 350.1 Rev. 2.0	Ammonia-N	104	100 99.2			0.567
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	97.1 95.7			0.937
EPA 353.2 Rev. 2.0	NO2NO3-N	103	102			0.903
EPA 365.1 Rev. 2.0	Total-P	102	101 100			0.819
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	92.8 94.9			2.05
SM 2120 B	Color (true)				1.97	
SM 2320 B-97	Total Alkalinity	103			0.620	
	Total Alkalinity	103			2.49	
SM 2540 C-97	TDS				5.11	
SM 2540 D-97	TSS				6.06	
SM 4500 F-C-97	Fluoride	93.5	98.8 98.8			0.0
	Fluoride	94.5	95.8 97.6			1.52
SM 5310 B-00	Organic Carbon	93.8	92.2 94.1			1.28
	Organic Carbon	96.6	93.0 93.4			0.225

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1907880, 1907881

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1907880, 1907881
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1907880, 1907881
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1907882, 1907883
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1907882, 1907883
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1907882, 1907883
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1907882, 1907883
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1907884, 1907885
SM 2120 B / E31780	True Color measured at 450 nm	1907880, 1907881
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1907880, 1907881
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1907880, 1907881
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1907880, 1907881
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1907880, 1907881
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1907882, 1907883

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	06/21/2017			06/21/2017 15:22	DeAsia Armster	1907880, 1907881
EPA 300.0 Rev. 2.1	06/21/2017			06/23/2017	Julia Storbeck	1907880, 1907881
EPA 350.1 Rev. 2.0	06/21/2017			06/22/2017	Sofia Elnemr	1907882, 1907883
EPA 351.2 Rev. 2.0	06/21/2017	06/23/2017	Adrian Shelby	06/28/2017	Joseph Suarez	1907882, 1907883
EPA 353.2 Rev. 2.0	06/21/2017			06/26/2017	Beverly Y. Sanders	1907882, 1907883
EPA 365.1 Rev. 2.0	06/21/2017	06/23/2017	Vijayalakshmi Reddy	06/26/2017	Lipi Saha	1907882, 1907883
EPA 365.1 Rev. 2.0 dissolved	06/21/2017			06/21/2017 15:09	Ping Hua	1907884, 1907885
SM 2120 B	06/21/2017			06/21/2017 15:31	Tanya Welborn	1907880, 1907881
SM 2320 B-97	06/21/2017			06/26/2017	Dale L. Simmons	1907880
	06/21/2017			06/27/2017	Dale L. Simmons	1907881
SM 2540 C-97	06/21/2017			06/23/2017	Yijie Li	1907880, 1907881
SM 2540 D-97	06/21/2017			06/23/2017	Yijie Li	1907880, 1907881
SM 4500 F-C-97	06/21/2017			06/26/2017	Dale L. Simmons	1907880
	06/21/2017			06/27/2017	Dale L. Simmons	1907881
SM 5310 B-00	06/21/2017			06/25/2017	Sofia Elnemr	1907882
	06/21/2017			06/26/2017	Sofia Elnemr	1907883