

Chemical Analysis Report

CEN-DIST-2017-12-08-01

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

Event Description: **Hatchineha / Reedy Bw Rus**
Request ID: **RQ-2017-10-16-34**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Mike Linger

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 27-DEC-2017 09:58

A handwritten signature in black ink, appearing to read "Liang Lin", 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: Dead River @ Power Lines

Collection Date/Time: 12/07/2017 11:40

Field ID: G1CE0056

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1952174	EPA 180.1 Rev. 2.0	Turbidity	5.2	A	NTU	P336667	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P336894	
		Sulfate	13		mg SO4/L	P336897	
	SM 2120 B	Color (true)	29	A	PCU	P336664	
	SM 2320 B-97	Total Alkalinity	96		mg CaCO3/L	P337028	
	SM 2540 C-97	TDS	193		mg/L	P336961	
	SM 2540 D-97	TSS	9	I	mg/L	P337100	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P337030	
1952176	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P337421	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P337137	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P337282	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P337054	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P336869	
1952178	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P336665	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Jackson Canal 1100m DS of Control Structure

Collection Date/Time: 12/07/2017 10:35

Field ID: G4CE0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1952175	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P336667	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P336894	
		Sulfate	0.99		mg SO4/L	P336897	
	SM 2120 B	Color (true)	230		PCU	P336664	
	SM 2320 B-97	Total Alkalinity	21		mg CaCO3/L	P337028	
	SM 2540 C-97	TDS	101		mg/L	P336962	
	SM 2540 D-97	TSS	4	I	mg/L	P337100	
	SM 4500 F-C-97	Fluoride	0.083	I	mg F/L	P337030	
1952177	EPA 350.1 Rev. 2.0	Ammonia-N	0.081		mg N/L	P337421	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P337137	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P337282	
	EPA 365.1 Rev. 2.0	Total-P	0.094		mg P/L	P337054	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P336869	
1952179	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.038		mg P/L	P336665	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P336667

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336894

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336897

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P337421

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P337137

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P337282

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P337054

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336665

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

Reference Method: SM 2120 B
Batch ID: P336664

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P337028

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

Reference Method: SM 2540 C-97
Batch ID: P336961

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P336962

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P337100

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P337030

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P336869

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: P336894

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336897

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P337421

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P337421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	107		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P337137

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P337282

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: P337054

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P336665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.7		P	90 - 110

Reference Method: SM 2320 B-97
 Batch ID: P337028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	95 - 108

Reference Method: SM 4500 F-C-97
 Batch ID: P337030

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.3		P	92 - 103

Reference Method: SM 5310 B-00
 Batch ID: P336869

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P336894

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1952184	Chloride	103		P	90 - 110
1952912	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336897

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1952184	Sulfate	102		P	90 - 110
1952912	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P337421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1952176	Ammonia-N	108	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P337282

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1951568	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P337054

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1951939	Total-P	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1952178	O-Phosphate-P	90.2	90.9	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P337030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1952923	Fluoride	95.2	96.8	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P336869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1952176	Organic Carbon	95.4	96.2	P/P	85 - 115

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P336667

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952174	Turbidity	2.68	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336894

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952184	Chloride	5.44	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952184	Sulfate	5.35	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P337421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952176	Ammonia-N	4.21	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P337137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952176	Kjeldahl Nitrogen	2.71	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P337282

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1951568	NO2NO3-N	0.160	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P337054

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1951939	Total-P	0.582	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952178	O-Phosphate-P	0.773	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
 Batch ID: P336664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952174	Color (true)	1.20	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P337028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952923	Total Alkalinity	0.0999	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
 Batch ID: P336961

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1951397	TDS	5.80	Sample	P	0 - 10

Reference Method: SM 2540 C-97
 Batch ID: P336962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952232	TDS	3.11	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P337030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952923	Fluoride	1.49	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P336869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1952176	Organic Carbon	0.436	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Run ID: A80793
 Included Lab Sample IDs: 1952178, 1952179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.2	99.5	P/P	90 - 110
O-Phosphate-P	99.5	95.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A80794

Included Lab Sample IDs: 1952174, 1952175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.3	97.2	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A80795

Included Lab Sample IDs: 1952174, 1952175

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

Reference Method: SM 5310 B-00

Run ID: A80862

Included Lab Sample IDs: 1952176, 1952177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.2	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A80872

Included Lab Sample IDs: 1952174, 1952175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	106	P/P	90 - 110
Sulfate	98.6	102	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A80931

Included Lab Sample IDs: 1952174, 1952175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	98.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A80931

Included Lab Sample IDs: 1952174, 1952175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	99.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80966

Included Lab Sample IDs: 1952177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.7	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80968

Included Lab Sample IDs: 1952176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A80993
Included Lab Sample IDs: 1952176, 1952177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A81041
Included Lab Sample IDs: 1952176, 1952177

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A81097
Included Lab Sample IDs: 1952176, 1952177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	105	105	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				2.68	
EPA 300.0 Rev. 2.1	Chloride	102	103	102	5.44	
	Sulfate	99.6	102	101	5.35	
EPA 350.1 Rev. 2.0	Ammonia-N	107	108	101		4.21
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102				2.71
EPA 353.2 Rev. 2.0	NO2NO3-N	103	102	103		0.160
EPA 365.1 Rev. 2.0	Total-P	96.9	100	99.5		0.582
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	95.7	90.2	90.9		0.773
SM 2120 B	Color (true)				1.20	
SM 2320 B-97	Total Alkalinity	100			0.0999	
SM 2540 C-97	TDS				5.80	
	TDS				3.11	
SM 4500 F-C-97	Fluoride	96.3	95.2	96.8		1.49
SM 5310 B-00	Organic Carbon	95.3	95.4	96.2		0.436

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1952174, 1952175
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1952174, 1952175
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1952174, 1952175

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1952176, 1952177
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1952176, 1952177
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1952176, 1952177
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1952176, 1952177
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1952178, 1952179
SM 2120 B / E31780	True Color measured at 450 nm	1952174, 1952175
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1952174, 1952175
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1952174, 1952175
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1952174, 1952175
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1952174, 1952175
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1952176, 1952177

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	12/08/2017			12/08/2017 16:37	Tanya Welborn	1952174, 1952175
EPA 300.0 Rev. 2.1	12/08/2017			12/13/2017	Julia Storbeck	1952174, 1952175
EPA 350.1 Rev. 2.0	12/08/2017			12/21/2017	Sofia Elnemr	1952176, 1952177
EPA 351.2 Rev. 2.0	12/08/2017	12/18/2017	Adrian Shelby	12/19/2017	Joseph Suarez	1952176, 1952177
EPA 353.2 Rev. 2.0	12/08/2017			12/20/2017	Lauren Bottorf	1952176, 1952177
EPA 365.1 Rev. 2.0	12/08/2017	12/15/2017	Sima Feizi	12/18/2017	Lipi Saha	1952176, 1952177
EPA 365.1 Rev. 2.0 dissolved	12/08/2017			12/08/2017 14:14	Megan Treadwell	1952178
	12/08/2017			12/08/2017 14:25	Megan Treadwell	1952179
SM 2120 B	12/08/2017			12/08/2017 15:53	Tanya Welborn	1952174
	12/08/2017			12/08/2017 15:56	Tanya Welborn	1952175
SM 2320 B-97	12/08/2017			12/15/2017	Dale L. Simmons	1952174, 1952175
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