Chemical Analysis Report

CEN-DIST-2018-01-24-01

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

Event Description: **Deep creek / Lk Shaw**
Request ID: **RQ-2018-01-22-37**
Customer: **CEN-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 12-FEB-2018 14:51

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: SHAW LAKE @ CENTER OF NORTH LOBE (29061) **Collection Date/Time: 01/23/2018 12:02**

Field ID: G2CE0127 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1961536	EPA 180.1 Rev. 2.0	Turbidity	0.45		NTU	P338720	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P338845	
		Sulfate	6.7		mg SO4/L	P338847	
	SM 2120 B	Color (true)	640		PCU	P338731	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P339015	
	SM 2540 C-97	TDS	112		mg/L	P339139	
	SM 2540 D-97	TSS	2	I	mg/L	P339361	
	SM 4500 F-C-97	Fluoride	0.040	I	mg F/L	P339020	
1961538	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P339038	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P338905	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.044		mg N/L	P338782	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P338879	
	SM 5310 B-00	Organic Carbon	45		mg C/L	P339205	
1961540	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P338757	

Ref. Method and Comment:
SM 2320 B-97: 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.
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: DEEP CREEK @ 400M S OF SR40 (2908) **Collection Date/Time: 01/23/2018 12:50**

Field ID: G2CE0167 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1961537	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P338720	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P338845	
		Sulfate	0.47	I	mg SO4/L	P338847	
	SM 2120 B	Color (true)	700		PCU	P338731	
	SM 2320 B-97	Total Alkalinity	2.7		mg CaCO3/L	P339015	
	SM 2540 C-97	TDS	129		mg/L	P339139	
	SM 2540 D-97	TSS	2	I	mg/L	P339361	
	SM 4500 F-C-97	Fluoride	0.050	I	mg F/L	P339020	
1961539	EPA 350.1 Rev. 2.0	Ammonia-N	0.053		mg N/L	P339038	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P338742	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P338782	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P338879	
	SM 5310 B-00	Organic Carbon	54		mg C/L	P339205	
1961541	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P338757	

Ref. Method and Comment:
SM 2320 B-97: 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.
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: 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: P338720

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338845

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338847

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339038

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338742

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338905

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338782

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338879

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P338757

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: P338731

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P339015

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

Reference Method: SM 2540 C-97
Batch ID: P339139

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P339361

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P339020

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P339205

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: P338845

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339038

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339038

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: P338742

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338905

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338782

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338879

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: P338757

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.5		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P339015

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P339020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P339205

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338845

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961439	Chloride	102		P	90 - 110
1961483	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961439	Sulfate	98.6		P	90 - 110
1961483	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961494	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338742

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961488	Kjeldahl Nitrogen	97.7	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1962341	Kjeldahl Nitrogen	104	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961485	NO2NO3-N	97.4	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961555	Total-P	96.1	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P339020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961779	Fluoride	97.1	98.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P339205

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1961143	Organic Carbon	98.0	98.7	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P338720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961493	Turbidity	5.40	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338845

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961439	Chloride	1.65	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P338847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961439	Sulfate	2.59	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339038

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961494	Ammonia-N	1.32	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338742

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961488	Kjeldahl Nitrogen	1.03	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P338905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1962341	Kjeldahl Nitrogen	3.90	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P338782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961485	NO2NO3-N	0.966	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P338879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961555	Total-P	4.25	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P338757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961489	O-Phosphate-P	0.805	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P338731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961484	Color (true)	0.955	Sample	P	0 - 20

Reference Method: SM 2540 C-97
Batch ID: P339139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961493	TDS	4.94	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P339020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961779	Fluoride	0.938	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P339205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1961143	Organic Carbon	0.503	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: A81616
Included Lab Sample IDs: 1961536, 1961537

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	103	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A81628
Included Lab Sample IDs: 1961536, 1961537

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.5	P/P	95 - 105

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B
Run ID: A81630
Included Lab Sample IDs: 1961536, 1961537

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	85 - 115
Color (true)	103	108	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A81635
Included Lab Sample IDs: 1961540, 1961541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	98.6	P/P	90 - 110
O-Phosphate-P	99.9	99.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A81644
Included Lab Sample IDs: 1961538, 1961539

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A81684
Included Lab Sample IDs: 1961539

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A81706
Included Lab Sample IDs: 1961538, 1961539

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A81724
Included Lab Sample IDs: 1961538

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

Reference Method: SM 2320 B-97
Run ID: A81736
Included Lab Sample IDs: 1961536, 1961537

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.0	97.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A81736
Included Lab Sample IDs: 1961536, 1961537

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500 F-C-97
Run ID: A81736
Included Lab Sample IDs: 1961536, 1961537

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A81740
Included Lab Sample IDs: 1961538, 1961539

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

Reference Method: SM 5310 B-00
Run ID: A81806
Included Lab Sample IDs: 1961538, 1961539

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	96.8	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					5.40	
EPA 300.0 Rev. 2.1	Chloride	101	102	100		1.65	
	Sulfate	98.5	98.6	98.3		2.59	
EPA 350.1 Rev. 2.0	Ammonia-N	101	101	102			1.32
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.4	97.7	99.1			1.03
	Kjeldahl Nitrogen	99.2	104	97.8			3.90
EPA 353.2 Rev. 2.0	NO2NO3-N	102	97.4	96.4			0.966
EPA 365.1 Rev. 2.0	Total-P	101	96.1	101			4.25
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5					0.805
SM 2120 B	Color (true)					0.955	
SM 2320 B-97	Total Alkalinity	101					
SM 2540 C-97	TDS					4.94	
SM 4500 F-C-97	Fluoride	96.1	97.1	98.0			0.938
SM 5310 B-00	Organic Carbon	96.1	98.0	98.7			0.503

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1961536, 1961537
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1961536, 1961537
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1961536, 1961537

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1961538, 1961539
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1961538, 1961539
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1961538, 1961539
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1961538, 1961539
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1961540, 1961541
SM 2120 B / E31780	True Color measured at 450 nm	1961536, 1961537
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1961536, 1961537
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1961536, 1961537
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1961536, 1961537
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1961536, 1961537
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1961538, 1961539

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	01/24/2018			01/24/2018 15:22	DeAsia Armster	1961536, 1961537
EPA 300.0 Rev. 2.1	01/24/2018			01/25/2018	Julia Storbeck	1961536, 1961537
EPA 350.1 Rev. 2.0	01/24/2018			01/30/2018	Julia Storbeck	1961538, 1961539
EPA 351.2 Rev. 2.0	01/24/2018	01/25/2018	Adrian Shelby	01/26/2018	Joseph Suarez	1961539
	01/24/2018	01/29/2018	Adrian Shelby	01/30/2018	Joseph Suarez	1961538
EPA 353.2 Rev. 2.0	01/24/2018			01/25/2018	Beverly Y. Sanders	1961538, 1961539
EPA 365.1 Rev. 2.0	01/24/2018	01/26/2018	Sima Feizi	01/29/2018	Lipi Saha	1961538, 1961539
EPA 365.1 Rev. 2.0 dissolved	01/24/2018			01/24/2018 15:27	Megan Treadwell	1961540
	01/24/2018			01/24/2018 16:02	Megan Treadwell	1961541
SM 2120 B	01/24/2018			01/24/2018 16:44	Tanya Welborn	1961536
	01/24/2018			01/24/2018 16:46	Tanya Welborn	1961537
SM 2320 B-97	01/24/2018			01/30/2018	Lauren Bottorf	1961536, 1961537
SM 2540 C-97	01/24/2018			01/26/2018	Yijie Li	1961536, 1961537
SM 2540 D-97	01/24/2018			01/26/2018	Yijie Li	1961536, 1961537
SM 4500 F-C-97	01/24/2018			01/30/2018	Lauren Bottorf	1961536, 1961537
SM 5310 B-00	01/24/2018			01/31/2018	Megan Treadwell	1961538, 1961539