Chemical Analysis Report

CEN-DIST-2017-02-01-01

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

Event Description: **kit A x2**
Request ID: **RQ-2017-01-23-50**
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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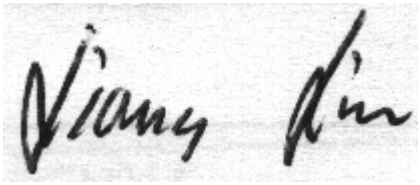
Certified by: Liang Lin, Environmental Administrator

Date Certified: 23-FEB-2017 11:25



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: LITTLE HAW CREEK @ JUST UPSTREAM OF SR11 **Collection Date/Time: 01/31/2017 11:59**

Field ID: G2CE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1868459	EPA 180.1 Rev. 2.0	Turbidity	0.40		NTU	P319111	
	EPA 300.0 Rev. 2.1	Chloride	28		mg Cl/L	P319327	
		Sulfate	1.1		mg SO4/L	P319330	
	SM 2120 B	Color (true)	380		PCU	P319141	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P319317	
	SM 2540 C-97	TDS	133		mg/L	P319879	
	SM 2540 D-97	TSS	2	U	mg/L	P319488	
	SM 4500 F-C-97	Fluoride	0.035	I	mg F/L	P319321	
1868461	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P319343	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P319126	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P319260	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P319129	
	SM 5310 B-00	Organic Carbon	59		mg C/L	P319239	
1868463	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P319105	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: LAKE LOUISE @ CENER OF SOUTH LOBE **Collection Date/Time: 01/31/2017 13:00**

Field ID: G2CE0065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1868460	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P319111	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P319383	
		Sulfate	29		mg SO4/L	P319385	
	SM 2120 B	Color (true)	18		PCU	P319141	
	SM 2320 B-97	Total Alkalinity	10		mg CaCO3/L	P319317	
	SM 2540 C-97	TDS	141		mg/L	P319879	
	SM 2540 D-97	TSS	6	I	mg/L	P319488	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P319321	
1868462	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P319343	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P319126	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P319260	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P319129	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P319239	
1868464	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P319105	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 350.1 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: P319111

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319327

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319330

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319383

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319385

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P319343

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319126

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P319260

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319129

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: P319105

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

Reference Method: SM 2120 B
Batch ID: P319141

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P319317

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

Reference Method: SM 2540 C-97
Batch ID: P319879

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P319488

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P319321

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P319239

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: P319327

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319330

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: P319330

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319383

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319385

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P319343

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: P319126

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P319260

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: P319129

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319105

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

Reference Method: SM 2320 B-97
Batch ID: P319317

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: P319321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P319239

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319327

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868387	Chloride	106		P	90 - 110
1868459	Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868387	Sulfate	99.3		P	90 - 110
1868459	Sulfate	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319383

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1867410	Chloride	101		P	90 - 110
1868471	Chloride	98.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319385

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1867410	Sulfate	98.0		P	90 - 110
1868471	Sulfate	96.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319126

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868425	Kjeldahl Nitrogen	104	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P319260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868423	NO2NO3-N	97.2		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319129

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868474	Total-P	97.1	92.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868479	O-Phosphate-P	98.4	97.1	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P319321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1869026	Fluoride	99.8	101	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P319239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1868302	Organic Carbon	98.2	96.7	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P319111

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868411	Turbidity	3.17	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319327

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868387	Chloride	0.924	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868387	Sulfate	0.110	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319383

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1867410	Chloride	0.180	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P319385

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1867410	Sulfate	0.310	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P319343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868423	Ammonia-N	0.230	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319126

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868425	Kjeldahl Nitrogen	0.0961	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P319260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868423	NO2NO3-N	0.240	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868474	Total-P	5.22	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868479	O-Phosphate-P	1.33	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P319141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868472	Color (true)	2.51	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P319317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1869026	Total Alkalinity	0.352	Sample	P	0 - 4.8

Quality Assurance Report
Precision

Reference Method: SM 2540 C-97
Batch ID: P319879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868422	TDS	1.31	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P319321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1869026	Fluoride	0.513	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P319239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1868302	Organic Carbon	1.54	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: A74206
Included Lab Sample IDs: 1868459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	104	P/P	90 - 110
Sulfate	92.4	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A74214
Included Lab Sample IDs: 1868463, 1868464

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	102	99.6	P/P	90 - 110
O-Phosphate-P	99.7	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A74215
Included Lab Sample IDs: 1868459, 1868460

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

Reference Method: SM 2120 B
Run ID: A74223
Included Lab Sample IDs: 1868459, 1868460

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B
Run ID: A74223
Included Lab Sample IDs: 1868459, 1868460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	104	P/P	85 - 115
Color (true)	99.6	100	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A74255
Included Lab Sample IDs: 1868461, 1868462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	95.5	95.0	P/P	90 - 110
NO2NO3-N	98.0	97.0	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A74257
Included Lab Sample IDs: 1868461, 1868462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	98.4	P/P	90 - 110
Organic Carbon	98.0	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A74274
Included Lab Sample IDs: 1868461, 1868462

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

Reference Method: SM 2320 B-97
Run ID: A74281
Included Lab Sample IDs: 1868459, 1868460

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

Reference Method: SM 4500 F-C-97
Run ID: A74281
Included Lab Sample IDs: 1868459, 1868460

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A74283
Included Lab Sample IDs: 1868461, 1868462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.2	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A74290
Included Lab Sample IDs: 1868461, 1868462

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A74307
Included Lab Sample IDs: 1868460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	94.8	97.0	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					3.17	
EPA 300.0 Rev. 2.1	Chloride	105	106	107		0.924	
	Chloride	100	101	98.3		0.180	
	Sulfate	98.9	99.3	102		0.110	
	Sulfate	97.6	98.0	96.2		0.310	
EPA 350.1 Rev. 2.0	Ammonia-N	105					0.230
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	104	105			0.0961
EPA 353.2 Rev. 2.0	NO2NO3-N	102	97.2				0.240
EPA 365.1 Rev. 2.0	Total-P	98.2	97.1	92.0			5.22
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	98.4	97.1			1.33
SM 2120 B	Color (true)					2.51	
SM 2320 B-97	Total Alkalinity	103				0.352	
SM 2540 C-97	TDS					1.31	
SM 4500 F-C-97	Fluoride	99.5	99.8	101			0.513
SM 5310 B-00	Organic Carbon	94.2	98.2	96.7			1.54

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1868459, 1868460
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1868459, 1868460
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1868459, 1868460
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1868461, 1868462
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1868461, 1868462
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1868461, 1868462

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1868461, 1868462
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1868463, 1868464
SM 2120 B / E31780	True Color measured at 450 nm	1868459, 1868460
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1868459, 1868460
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1868459, 1868460
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1868459, 1868460
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1868459, 1868460
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1868461, 1868462

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	02/01/2017			02/01/2017 16:18	Julie Michelle Frank	1868459, 1868460
EPA 300.0 Rev. 2.1	02/01/2017			02/04/2017	Ping Hua	1868459
	02/01/2017			02/06/2017	Ping Hua	1868460
EPA 350.1 Rev. 2.0	02/01/2017			02/02/2017	Sofia Elnemr	1868461, 1868462
EPA 351.2 Rev. 2.0	02/01/2017	02/02/2017	Adrian Shelby	02/03/2017	Joseph Suarez	1868461, 1868462
EPA 353.2 Rev. 2.0	02/01/2017			02/03/2017	Beverly Y. Sanders	1868461, 1868462
EPA 365.1 Rev. 2.0	02/01/2017	02/02/2017	Adrian Shelby	02/06/2017	Lipi Saha	1868461, 1868462
EPA 365.1 Rev. 2.0 dissolved	02/01/2017			02/01/2017 14:59	Julia Storbeck	1868464
	02/01/2017			02/01/2017 15:27	Julia Storbeck	1868463
SM 2120 B	02/01/2017			02/01/2017 18:02	Jared I. Manley	1868460
	02/01/2017			02/01/2017 18:47	Jared I. Manley	1868459
SM 2320 B-97	02/01/2017			02/04/2017	Dale L. Simmons	1868459, 1868460
SM 2540 C-97	02/01/2017			02/02/2017	Sima Feizi	1868459, 1868460
SM 2540 D-97	02/01/2017			02/02/2017	Sima Feizi	1868459, 1868460
SM 4500 F-C-97	02/01/2017			02/04/2017	Dale L. Simmons	1868459, 1868460
SM 5310 B-00	02/01/2017			02/01/2017	Julie Michelle Frank	1868461
	02/01/2017			02/02/2017	Julie Michelle Frank	1868462