

Chemical Analysis Report

SW-DIST-2018-10-18-01

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

Event Description: **Bear Creek & Green Lake**
Request ID: **RQ-2018-10-15-04**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 07-NOV-2018 13:22



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: BEAR CREEK @ BEACON

Collection Date/Time: 10/17/2018 10:40

Field ID: G5SW0102

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2034055	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P353461	
	EPA 300.0 Rev. 2.1	Chloride	170		mg Cl/L	P353877	
		Sulfate	41		mg SO4/L	P353879	
	SM 2120 B	Color (true)	16		PCU	P353299	
	SM 2320 B-97	Total Alkalinity	182		mg CaCO3/L	P353711	
	SM 2540 C-97	TDS	548	A	mg/L	P353888	
	SM 2540 D-97	TSS	5	IA	mg/L	P353842	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P353714	
2034057	EPA 350.1 Rev. 2.0	Ammonia-N	0.066		mg N/L	P353864	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P353607	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P353768	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P353467	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P353942	
2034059	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.030		mg P/L	P353315	

Ref. Method and Comment:

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

Sample Location: GREEN LAKE NORTH

Collection Date/Time: 10/17/2018 11:30

Field ID: G5SW0107

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2034056	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P353461	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P353877	
		Sulfate	0.20	U	mg SO4/L	P353879	
	SM 2120 B	Color (true)	33		PCU	P353299	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P353711	
	SM 2540 C-97	TDS	73		mg/L	P353888	
	SM 2540 D-97	TSS	2	I	mg/L	P353842	
	SM 4500 F-C-97	Fluoride	0.058	I	mg F/L	P353714	
2034058	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P353864	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P353737	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P353768	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P353467	
	SM 5310 B-00	Organic Carbon	9.9		mg C/L	P353942	
2034060	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P353315	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P353461

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353877

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353879

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P353864

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353607

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353737

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353768

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: P353467

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353315

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: P353299

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P353711

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

Reference Method: SM 2540 C-97
Batch ID: P353888

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P353842

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P353714

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P353942

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: P353877

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353879

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P353864

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353607

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	109		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353768

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353467

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353315

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.8		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P353299

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P353711

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P353714

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.9		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P353942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034033	Chloride	98.1		P	90 - 110
2034338	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034033	Sulfate	96.9		P	90 - 110
2034338	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P353864

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034058	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353607

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2033976	Kjeldahl Nitrogen	99.6	97.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034470	Kjeldahl Nitrogen	101	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034301	NO2NO3-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353467

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034057	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2033918	O-Phosphate-P	93.8	95.6	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P353714

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2033920	Fluoride	97.6	97.6	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P353942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034057	Organic Carbon	95.5	94.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P353461

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034001	Turbidity	2.25	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034033	Chloride	0.123	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034033	Sulfate	0.492	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P353864

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034058	Ammonia-N	0.739	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353607

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2033976	Kjeldahl Nitrogen	1.43	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034470	Kjeldahl Nitrogen	1.13	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034301	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034057	Total-P	1.60	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P353315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2033918	O-Phosphate-P	1.90	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P353299

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2033973	Color (true)	1.93	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P353711

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2033920	Total Alkalinity	0.631	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P353888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034055	TDS	6.02	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P353714

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2033920	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P353942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034057	Organic Carbon	1.32	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: SM 2120 B

Run ID: A87127

Included Lab Sample IDs: 2034055, 2034056

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A87131

Included Lab Sample IDs: 2034059, 2034060

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A87200

Included Lab Sample IDs: 2034055, 2034056

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87213

Included Lab Sample IDs: 2034057

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87220

Included Lab Sample IDs: 2034058

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A87281

Included Lab Sample IDs: 2034057

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	98.1	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A87299

Included Lab Sample IDs: 2034055, 2034056

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

Reference Method: SM 4500 F-C-97

Run ID: A87299

Included Lab Sample IDs: 2034055, 2034056

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A87323

Included Lab Sample IDs: 2034057, 2034058

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A87357

Included Lab Sample IDs: 2034058

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A87366

Included Lab Sample IDs: 2034057, 2034058

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	101	P/P	90 - 110
Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A87375

Included Lab Sample IDs: 2034055, 2034056

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

Reference Method: SM 5310 B-00

Run ID: A87403

Included Lab Sample IDs: 2034057, 2034058

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	95.5	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					2.25	
EPA 300.0 Rev. 2.1	Chloride	103	98.1	101		0.123	
	Sulfate	103	96.9	102		0.492	
EPA 350.1 Rev. 2.0	Ammonia-N	103	102	102			0.739
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	99.6	97.7			1.43
	Kjeldahl Nitrogen	109	101	103			1.13
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.0	99.0	98.5			0.506
EPA 365.1 Rev. 2.0	Total-P	100	103	101			1.60
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8	93.8	95.6			1.90
SM 2120 B	Color (true)	103				1.93	
SM 2320 B-97	Total Alkalinity	103				0.631	
SM 2540 C-97	TDS					6.02	
SM 4500 F-C-97	Fluoride	98.9	97.6	97.6			0.0
SM 5310 B-00	Organic Carbon	93.2	95.5	94.0			1.32

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2034055, 2034056
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2034055, 2034056
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2034055, 2034056
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2034057, 2034058
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2034057, 2034058
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2034057, 2034058
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2034057, 2034058
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2034059, 2034060
SM 2120 B / E31780	True Color measured at 450 nm	2034055, 2034056
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2034055, 2034056
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2034055, 2034056
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2034055, 2034056
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2034055, 2034056
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2034057, 2034058

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	10/18/2018			10/18/2018 15:59	Megan Treadwell	2034055, 2034056
EPA 300.0 Rev. 2.1	10/18/2018			10/27/2018 02:07	Lipi Saha	2034055
	10/18/2018			10/27/2018 02:19	Lipi Saha	2034056
EPA 350.1 Rev. 2.0	10/18/2018			10/29/2018 13:55	Ping Hua	2034057
	10/18/2018			10/29/2018 14:07	Ping Hua	2034058
EPA 351.2 Rev. 2.0	10/18/2018	10/24/2018 11:00	Adrian Shelby	10/25/2018 11:58	Joseph Suarez	2034057
	10/18/2018	10/26/2018 10:25	Adrian Shelby	10/29/2018 12:22	Virginia P. Brown	2034058
EPA 353.2 Rev. 2.0	10/18/2018			10/26/2018 11:59	Lauren Bottorf	2034057
	10/18/2018			10/26/2018 12:00	Lauren Bottorf	2034058
EPA 365.1 Rev. 2.0	10/18/2018	10/22/2018 13:00	Sima Feizi	10/23/2018 08:38	Beverly Y. Sanders	2034057
	10/18/2018	10/22/2018 13:00	Sima Feizi	10/23/2018 12:20	Beverly Y. Sanders	2034058
EPA 365.1 Rev. 2.0 dissolved	10/18/2018			10/18/2018 17:53	Anthony C. Onicha	2034059, 2034060
SM 2120 B	10/18/2018			10/18/2018 16:00	Chelsea Hernandez	2034055
	10/18/2018			10/18/2018 16:01	Chelsea Hernandez	2034056
SM 2320 B-97	10/18/2018			10/24/2018 15:50	Dale L. Simmons	2034055
	10/18/2018			10/24/2018 16:00	Dale L. Simmons	2034056
SM 2540 C-97	10/18/2018			10/23/2018 15:01	Yijie Li	2034055, 2034056
SM 2540 D-97	10/18/2018			10/23/2018 15:01	Yijie Li	2034055, 2034056
SM 4500 F-C-97	10/18/2018			10/24/2018 15:50	Dale L. Simmons	2034055
	10/18/2018			10/24/2018 16:00	Dale L. Simmons	2034056
SM 5310 B-00	10/18/2018			10/30/2018 01:38	Megan Treadwell	2034057
	10/18/2018			10/30/2018 02:34	Megan Treadwell	2034058