Chemical Analysis Report

TLH-ROC-2018-02-13-02

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

Event Description: **kit A w/ bacteria**
Request ID: **RQ-2018-01-29-48**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Michael Eckles

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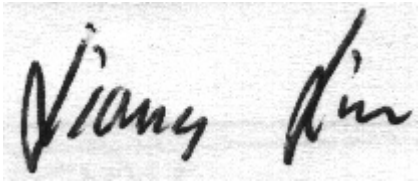
Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-MAR-2018 14:31



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: UNNAMED BRANCH @ FLAT CREEK RD. **Collection Date/Time: 02/13/2018 12:50**

Field ID: G2TLHR0031 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967006	EPA 180.1 Rev. 2.0	Turbidity	21		NTU	P339985	
	EPA 300.0 Rev. 2.1	Chloride	4.1	A	mg Cl/L	P340013	
		Sulfate	2.6	A	mg SO4/L	P340016	
	SM 2120 B	Color (true)	36	A	PCU	P339982	
	SM 2320 B-97	Total Alkalinity	29		mg CaCO3/L	P340526	
	SM 2540 C-97	TDS	67		mg/L	P340333	
	SM 2540 D-97	TSS	13		mg/L	P340228	
	SM 4500 F-C-97	Fluoride	0.084	I	mg F/L	P340530	
1967008	EPA 350.1 Rev. 2.0	Ammonia-N	0.047		mg N/L	P340463	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P339996	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.062		mg N/L	P340370	
	EPA 365.1 Rev. 2.0	Total-P	0.071		mg P/L	P340097	
	SM 5310 B-00	Organic Carbon	6.6		mg C/L	P340335	
1967010	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.019		mg P/L	P339881	

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: UNNAMED BRANCH @ HARDAWAY RD. 2 **Collection Date/Time: 02/13/2018 13:20**

Field ID: G2TLHR0041 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967007	EPA 180.1 Rev. 2.0	Turbidity	16		NTU	P339985	
	EPA 300.0 Rev. 2.1	Chloride	3.4		mg Cl/L	P340013	
		Sulfate	1.5		mg SO4/L	P340016	
	SM 2120 B	Color (true)	42		PCU	P339982	
	SM 2320 B-97	Total Alkalinity	2.2	I	mg CaCO3/L	P340526	
	SM 2540 C-97	TDS	22	I	mg/L	P340333	
	SM 2540 D-97	TSS	18		mg/L	P340228	
	SM 4500 F-C-97	Fluoride	0.045	I	mg F/L	P340530	
1967009	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P340463	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33		mg N/L	P339996	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P340370	
	EPA 365.1 Rev. 2.0	Total-P	0.096		mg P/L	P340097	
	SM 5310 B-00	Organic Carbon	5.2		mg C/L	P340335	
1967011	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.031		mg P/L	P339882	

Ref. Method and Comment:
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: P339985

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340013

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340016

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340463

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339996

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340370

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340097

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339881

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339882

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: P339982

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P340526

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

Reference Method: SM 2540 C-97
Batch ID: P340333

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P340228

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P340530

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P340335

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: P340013

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340016

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340463

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: P340463

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339996

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340370

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340097

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: P339881

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339882

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

Reference Method: SM 2320 B-97
Batch ID: P340526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P340530

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P340335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340013

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967006	Chloride	102		P	90 - 110
1967007	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340016

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967006	Sulfate	103		P	90 - 110
1967007	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967002	Ammonia-N	96.3	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967002	Kjeldahl Nitrogen	99.4	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340370

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967002	NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340097

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967002	Total-P	98.6	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966714	O-Phosphate-P	97.2	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P340530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966697	Fluoride	97.2	96.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P340335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967002	Organic Carbon	96.8	97.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P339985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967001	Turbidity	1.80	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967006	Chloride	1.64	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967006	Sulfate	2.34	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967002	Ammonia-N	1.40	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967002	Kjeldahl Nitrogen	0.991	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967002	NO2NO3-N	0.172	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967002	Total-P	1.88	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966714	O-Phosphate-P	1.12	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966816	O-Phosphate-P	0.379	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P339982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967006	Color (true)	1.97	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P340526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966697	Total Alkalinity	0.378	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P340333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966712	TDS	0.667	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P340530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966697	Fluoride	0.992	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P340335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967002	Organic Carbon	0.694	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: A82003
Included Lab Sample IDs: 1967006, 1967007

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A82036
Included Lab Sample IDs: 1967010, 1967011

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.8	99.1	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A82074
Included Lab Sample IDs: 1967006, 1967007

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	106	104	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A82076
Included Lab Sample IDs: 1967006, 1967007

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A82125
Included Lab Sample IDs: 1967008, 1967009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.2	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A82133
Included Lab Sample IDs: 1967008, 1967009

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

Reference Method: SM 5310 B-00
Run ID: A82196
Included Lab Sample IDs: 1967008, 1967009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	94.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A82217
Included Lab Sample IDs: 1967008, 1967009

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A82241
Included Lab Sample IDs: 1967008, 1967009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-97
Run ID: A82266
Included Lab Sample IDs: 1967006, 1967007

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.0	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A82266
Included Lab Sample IDs: 1967006, 1967007

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	96.7	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					1.80	
EPA 300.0 Rev. 2.1	Chloride	101	102	103		1.64	
	Sulfate	103	103	104		2.34	
EPA 350.1 Rev. 2.0	Ammonia-N	102	96.3	97.9			1.40
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	93.7	99.4	98.2			0.991
EPA 353.2 Rev. 2.0	NO2NO3-N	104	104				0.172
EPA 365.1 Rev. 2.0	Total-P	101	98.6	101			1.88
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.8	97.2	99.0			1.12
	O-Phosphate-P	102					0.379
SM 2120 B	Color (true)					1.97	
SM 2320 B-97	Total Alkalinity	99.1				0.378	
SM 2540 C-97	TDS					0.667	
SM 4500 F-C-97	Fluoride	95.9	97.2	96.0			0.992
SM 5310 B-00	Organic Carbon	97.0	96.8	97.6			0.694

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1967006, 1967007
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1967006, 1967007
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1967006, 1967007
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1967008, 1967009
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1967008, 1967009
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1967008, 1967009
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1967008, 1967009

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1967010, 1967011
SM 2120 B / E31780	True Color measured at 450 nm	1967006, 1967007
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1967006, 1967007
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1967006, 1967007
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1967006, 1967007
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1967006, 1967007
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1967008, 1967009

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	02/13/2018			02/14/2018 17:19	Sima Feizi	1967006, 1967007
EPA 300.0 Rev. 2.1	02/13/2018			02/14/2018	Julia Storbeck	1967006, 1967007
EPA 350.1 Rev. 2.0	02/13/2018			02/22/2018	Ping Hua	1967008, 1967009
EPA 351.2 Rev. 2.0	02/13/2018	02/15/2018	Adrian Shelby	02/16/2018	Joseph Suarez	1967008, 1967009
EPA 353.2 Rev. 2.0	02/13/2018			02/21/2018	Lauren Bottorf	1967008, 1967009
EPA 365.1 Rev. 2.0	02/13/2018	02/16/2018	Sima Feizi	02/19/2018	Beverly Y. Sanders	1967008, 1967009
EPA 365.1 Rev. 2.0 dissolved	02/13/2018			02/13/2018 18:00	Megan Treadwell	1967010
	02/13/2018			02/13/2018 18:01	Megan Treadwell	1967011
SM 2120 B	02/13/2018			02/14/2018 17:37	Tanya Welborn	1967006
	02/13/2018			02/14/2018 17:38	Tanya Welborn	1967007
SM 2320 B-97	02/13/2018			02/23/2018	Dale L. Simmons	1967006, 1967007
SM 2540 C-97	02/13/2018			02/14/2018	DeAsia Armster	1967006, 1967007
SM 2540 D-97	02/13/2018			02/14/2018	DeAsia Armster	1967006, 1967007
SM 4500 F-C-97	02/13/2018			02/23/2018	Dale L. Simmons	1967006, 1967007
SM 5310 B-00	02/13/2018			02/20/2018	Megan Treadwell	1967008, 1967009