Chemical Analysis Report

TLH-ROC-2017-10-02-01

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

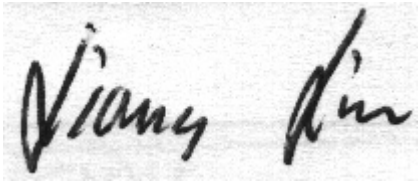
Event Description: **SMP 2017 Freshwater Kit A**
Request ID: **RQ-2017-09-25-37**
Customer: **TLH-ROC**
Project ID: **SMP**

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

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 17-OCT-2017 11:41



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: Fishbone Creek @ 212th **Collection Date/Time: 10/02/2017 14:10**

Field ID: G1TLHR0015-2017-04 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1933165	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P332675	
	EPA 300.0 Rev. 2.1	Chloride	8.2		mg Cl/L	P332900	
	SM 2120 B	Color (true)	160		PCU	P332650	
	SM 2320 B-97	Total Alkalinity	175		mg CaCO3/L	P332839	
	SM 2540 C-97	TDS	224		mg/L	P333016	
	SM 2540 D-97	TSS	2	I	mg/L	P332952	
	SM 4500 F-C-97	Fluoride	0.059	I	mg F/L	P332842	
1933167	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P332933	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P332718	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P332862	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P332627	
	SM 5310 B-00	Organic Carbon	23		mg C/L	P332873	
1933169	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P332687	

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: Sandhill Creek @ SW HWY 358 **Collection Date/Time: 10/02/2017 14:50**

Field ID: G1TLHR0060-2017-03 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1933166	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P332675	
	EPA 300.0 Rev. 2.1	Chloride	8.5		mg Cl/L	P332900	
	SM 2120 B	Color (true)	150		PCU	P332650	
	SM 2320 B-97	Total Alkalinity	194		mg CaCO3/L	P332839	
	SM 2540 C-97	TDS	258		mg/L	P333016	
	SM 2540 D-97	TSS	4	I	mg/L	P332952	
	SM 4500 F-C-97	Fluoride	0.055	I	mg F/L	P332842	
1933168	EPA 350.1 Rev. 2.0	Ammonia-N	0.071		mg N/L	P332933	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P332718	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022		mg N/L	P332863	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P332627	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P332873	
1933170	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P332687	

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: P332675

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P332900

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332933

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332718

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332862

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332863

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332627

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332687

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

Reference Method: SM 2120 B
Batch ID: P332650

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P332839

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P333016

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P332952

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P332842

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P332873

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: P332900

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332933

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: P332718

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.6		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332863

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332863

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332627

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332687

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

Reference Method: SM 2320 B-97
Batch ID: P332839

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

Reference Method: SM 4500 F-C-97
Batch ID: P332842

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.4		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P332873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.0		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P332900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933438	Chloride	96.8		P	90 - 110
1933439	Chloride	97.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332933

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933158	Ammonia-N	96.9	96.2	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332718

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932990	Kjeldahl Nitrogen	105	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932938	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332863

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933168	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932990	Total-P	95.6	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933169	O-Phosphate-P	98.3	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P332842

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932985	Fluoride	96.1	95.6	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P332873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933158	Organic Carbon	98.1	99.3	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P332675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933157	Turbidity	0.0	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P332900

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933438	Chloride	0.371	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332933

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933158	Ammonia-N	0.580	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332718

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932990	Kjeldahl Nitrogen	3.21	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932938	NO2NO3-N	0.284	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933168	NO2NO3-N	0.438	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932990	Total-P	2.18	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332687

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933169	O-Phosphate-P	2.61	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P332650

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933237	Color (true)	1.86	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P332839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932985	Total Alkalinity	0.401	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P333016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932987	TDS	5.59	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P332842

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932985	Fluoride	0.492	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P332873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933158	Organic Carbon	0.865	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: A79311
Included Lab Sample IDs: 1933165, 1933166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	103	P/P	85 - 115
Color (true)	94.3	101	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A79320
Included Lab Sample IDs: 1933165, 1933166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A79323
Included Lab Sample IDs: 1933169, 1933170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.8	98.1	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A79323
Included Lab Sample IDs: 1933169, 1933170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A79355
Included Lab Sample IDs: 1933167, 1933168

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

Reference Method: SM 2320 B-97
Run ID: A79374
Included Lab Sample IDs: 1933165, 1933166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A79374
Included Lab Sample IDs: 1933165, 1933166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A79383
Included Lab Sample IDs: 1933167, 1933168

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

Reference Method: SM 5310 B-00
Run ID: A79389
Included Lab Sample IDs: 1933167, 1933168

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	96.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A79401
Included Lab Sample IDs: 1933165, 1933166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A79410
Included Lab Sample IDs: 1933167, 1933168

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A79410
Included Lab Sample IDs: 1933167, 1933168

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A79434
Included Lab Sample IDs: 1933167, 1933168

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.1	98.2	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					0.0	
EPA 300.0 Rev. 2.1	Chloride	97.7	96.8	97.2		0.371	
EPA 350.1 Rev. 2.0	Ammonia-N	101	96.9	96.2			0.580
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.6	101	105			3.21
EPA 353.2 Rev. 2.0	NO2NO3-N	106	106	106			0.284
	NO2NO3-N	106	103	103			0.438
EPA 365.1 Rev. 2.0	Total-P	102	95.6	98.0			2.18
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.9	98.3	101			2.61
SM 2120 B	Color (true)					1.86	
SM 2320 B-97	Total Alkalinity	101				0.401	
SM 2540 C-97	TDS					5.59	
SM 4500 F-C-97	Fluoride	95.4	96.1	95.6			0.492
SM 5310 B-00	Organic Carbon	96.0	98.1	99.3			0.865

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1933165, 1933166
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1933165, 1933166
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1933167, 1933168
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1933167, 1933168
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1933167, 1933168
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1933167, 1933168
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1933169, 1933170
SM 2120 B / E31780	True Color measured at 450 nm	1933165, 1933166
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1933165, 1933166

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1933165, 1933166
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1933165, 1933166
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1933165, 1933166
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1933167, 1933168

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	10/02/2017			10/03/2017 15:52	DeAsia Armster	1933165, 1933166
EPA 300.0 Rev. 2.1	10/02/2017			10/05/2017	Julia Storbeck	1933165, 1933166
EPA 350.1 Rev. 2.0	10/02/2017			10/06/2017	Sofia Elnemr	1933167, 1933168
EPA 351.2 Rev. 2.0	10/02/2017	10/04/2017	Adrian Shelby	10/06/2017	Joseph Suarez	1933167, 1933168
EPA 353.2 Rev. 2.0	10/02/2017			10/06/2017	Beverly Y. Sanders	1933167, 1933168
EPA 365.1 Rev. 2.0	10/02/2017	10/03/2017	Sima Feizi	10/05/2017	Lipi Saha	1933167, 1933168
EPA 365.1 Rev. 2.0 dissolved	10/02/2017			10/03/2017 14:46	Megan Treadwell	1933169
	10/02/2017			10/03/2017 15:11	Megan Treadwell	1933170
SM 2120 B	10/02/2017			10/03/2017 14:06	Tanya Welborn	1933166
	10/02/2017			10/03/2017 15:09	Tanya Welborn	1933165
SM 2320 B-97	10/02/2017			10/05/2017	Dale L. Simmons	1933165, 1933166
SM 2540 C-97	10/02/2017			10/04/2017	Yijie Li	1933165, 1933166
SM 2540 D-97	10/02/2017			10/04/2017	Yijie Li	1933165, 1933166
SM 4500 F-C-97	10/02/2017			10/05/2017	Dale L. Simmons	1933165, 1933166
SM 5310 B-00	10/02/2017			10/06/2017	Ping Hua	1933167, 1933168