Chemical Analysis Report

SE-DIST-2016-06-02-01

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

Event Description: **SMP- North Bay Run (Resample)**
Request ID: **RQ-2016-05-30-52**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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2199 South Rock Road
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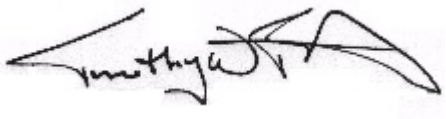
Date Certified: 22-JUN-2016 11:03



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 groups are included in this report: Metals and 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: ENRG7-8090 **Collection Date/Time: 06/01/2016 11:00**

Field ID: G5SE0033 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1803948	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P305524	
	SM 2320 B-97	Total Alkalinity	118		mg CaCO3/L	P305935	
	SM 2540 D-97	TSS	3	U	mg/L	P306043	
	SM 4500 F-C-97	Fluoride	1.3		mg F/L	P305938	
1803949	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P305867	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23	I	mg N/L	P305671	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P305644	
	EPA 365.1 Rev. 2.0	Total-P	0.01	I	mg P/L	P305998	
	SM 5310 B-00	Organic Carbon	2.1		mg C/L	P306215	
1803950	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P305484	
1803959	EPA 200.7 Rev. 4.4	Iron	150	U	ug/L	P305477	
	EPA 200.8 Rev. 5.4	Arsenic	2.00		ug/L	P305477	
		Cadmium	0.060	U	ug/L	P305477	
		Chromium	0.15	U	ug/L	P305477	
		Copper	0.40	I	ug/L	P305477	
		Lead	0.15	U	ug/L	P305477	
		Silver	0.015	U	ug/L	P305477	
		Zinc	3.0	U	ug/L	P305477	

Ref. Method and Comment:
SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: ENRH4-6001 **Collection Date/Time: 06/01/2016 11:30**

Field ID: G4SEBB32 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1803945	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P305524	
	SM 2320 B-97	Total Alkalinity	119		mg CaCO3/L	P305935	
	SM 2540 D-97	TSS	3	U	mg/L	P306043	
	SM 4500 F-C-97	Fluoride	1.2		mg F/L	P305938	
1803946	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P305867	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P305671	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P305644	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P305998	
	SM 5310 B-00	Organic Carbon	2.9		mg C/L	P306215	
1803947	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P305484	

Ref. Method and Comment:
SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P305524

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P305477

Component	Result	Code	Units
Iron	30	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P305477

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.050	U	ug/L
Copper	0.10	U	ug/L
Lead	0.050	U	ug/L
Silver	0.0050	U	ug/L
Zinc	1.0	U	ug/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305867

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305671

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305644

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305998

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305484

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

Reference Method: SM 2320 B-97
Batch ID: P305935

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P306043

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P305938

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P306215

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P305477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P305477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.1		P	85 - 115
Cadmium	99.6		P	85 - 115
Chromium	99.1		P	85 - 115
Copper	94.9		P	85 - 115
Lead	99.8		P	85 - 115
Silver	96.9		P	85 - 115
Zinc	96.5		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305867

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: P305671

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305644

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: P305644

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: P305998

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.4		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305484

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

Reference Method: SM 2320 B-97
Batch ID: P305935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P305938

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P306215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P305477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803193	Iron	103	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P305477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803193	Arsenic	105	103	P/P	70 - 130
1803193	Cadmium	97.5	95.4	P/P	70 - 130
1803193	Chromium	91.6	90.5	P/P	70 - 130
1803193	Copper	94.3	93.5	P/P	70 - 130
1803193	Lead	103	101	P/P	70 - 130
1803193	Silver	92.2	90.3	P/P	70 - 130

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P305477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803193	Zinc	94.1	93.3	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803786	Ammonia-N	103	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305671

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803663	Kjeldahl Nitrogen	98.1	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305644

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803786	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305998

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1803946	Total-P	90.9	92.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1804090	O-Phosphate-P	99.1	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P305938

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1804788	Fluoride	98.1	98.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P306215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1804089	Organic Carbon	94.9	97.1	P/P	85 - 115

Quality Assurance Report
Precision

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P305524

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803890	Turbidity	1.81	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P305477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803193	Iron	0.863	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P305477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803193	Arsenic	1.57	Spike	P	0 - 20
1803193	Cadmium	2.24	Spike	P	0 - 20
1803193	Chromium	1.25	Spike	P	0 - 20
1803193	Copper	0.822	Spike	P	0 - 20
1803193	Lead	1.43	Spike	P	0 - 20
1803193	Silver	2.07	Spike	P	0 - 20
1803193	Zinc	0.863	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803786	Ammonia-N	1.98	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803663	Kjeldahl Nitrogen	0.925	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803786	NO2NO3-N	1.37	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305998

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1803946	Total-P	1.34	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1804090	O-Phosphate-P	0.866	Spike	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P305935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1804788	Total Alkalinity	1.14	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97
Batch ID: P305938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1804788	Fluoride	0.464	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P306215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1804089	Organic Carbon	2.00	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 365.1 Rev. 2.0 dissolved
Run ID: A69817
Included Lab Sample IDs: 1803947, 1803950

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A69828
Included Lab Sample IDs: 1803945, 1803948

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A69857
Included Lab Sample IDs: 1803946, 1803949

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A69864
Included Lab Sample IDs: 1803959

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	100	98.7	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A69879
Included Lab Sample IDs: 1803959

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	100	P/P	90 - 110
Cadmium	97.8	98.1	P/P	90 - 110
Chromium	97.6	98.5	P/P	90 - 110
Copper	99.1	100	P/P	90 - 110
Lead	95.5	98.0	P/P	90 - 110
Silver	96.0	96.2	P/P	90 - 110
Zinc	98.8	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A69907
Included Lab Sample IDs: 1803946, 1803949

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69935
Included Lab Sample IDs: 1803946, 1803949

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

Reference Method: SM 2320 B-97
Run ID: A69953
Included Lab Sample IDs: 1803945, 1803948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	105	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A69953
Included Lab Sample IDs: 1803945, 1803948

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A70015
Included Lab Sample IDs: 1803946, 1803949

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A70048
Included Lab Sample IDs: 1803946, 1803949

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	96.6	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					1.81	
EPA 200.7 Rev. 4.4	Iron	105	103	102			0.863
EPA 200.8 Rev. 5.4	Arsenic	99.1	105	103			1.57
	Cadmium	99.6	97.5	95.4			2.24
	Chromium	99.1	91.6	90.5			1.25
	Copper	94.9	94.3	93.5			0.822
	Lead	99.8	103	101			1.43
	Silver	96.9	92.2	90.3			2.07
	Zinc	96.5	94.1	93.3			0.863
EPA 350.1 Rev. 2.0	Ammonia-N	102	103	105			1.98
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.6	98.1	99.3			0.925
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100	102			1.37
EPA 365.1 Rev. 2.0	Total-P	96.4	90.9	92.1			1.34
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	99.1	100			0.866
SM 2320 B-97	Total Alkalinity	103				1.14	
SM 4500 F-C-97	Fluoride	98.9	98.1	98.7			0.464
SM 5310 B-00	Organic Carbon	103	94.9	97.1			2.00

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1803945, 1803948
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1803959
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1803959
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1803946, 1803949
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1803946, 1803949
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1803946, 1803949
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1803946, 1803949
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1803947, 1803950
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1803945, 1803948
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1803945, 1803948
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1803945, 1803948

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1803946, 1803949

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	06/02/2016			06/02/2016 16:44	Blanca Fach	1803945, 1803948
EPA 200.7 Rev. 4.4	06/02/2016	06/02/2016	Elliott D. Healy	06/06/2016	Joshua Ayres	1803959
EPA 200.8 Rev. 5.4	06/02/2016	06/02/2016	Elliott D. Healy	06/04/2016	Charles J. Peterson	1803959
EPA 350.1 Rev. 2.0	06/02/2016			06/08/2016	Diana M. Turner	1803946, 1803949
EPA 351.2 Rev. 2.0	06/02/2016	06/07/2016	Sofia Elnemr	06/08/2016	Christopher Armour	1803946, 1803949
EPA 353.2 Rev. 2.0	06/02/2016			06/06/2016	Peter D. Kaus	1803946, 1803949
EPA 365.1 Rev. 2.0	06/02/2016	06/10/2016	Vijayalakshmi Reddy	06/14/2016	Lipi Saha	1803946, 1803949
EPA 365.1 Rev. 2.0 dissolved	06/02/2016			06/02/2016 17:36	Julia Storbeck	1803947
	06/02/2016			06/02/2016 17:37	Julia Storbeck	1803950
SM 2320 B-97	06/02/2016			06/09/2016	Dale L. Simmons	1803945, 1803948
SM 2540 D-97	06/02/2016			06/06/2016	Blanca Fach	1803945, 1803948
SM 4500 F-C-97	06/02/2016			06/09/2016	Dale L. Simmons	1803945, 1803948
SM 5310 B-00	06/02/2016			06/15/2016	Diana M. Turner	1803946, 1803949