

Chemical Analysis Report

CEN-DIST-2016-01-26-01

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

Event Description: **Lk Blue Cove/Sumter Blue+DO**

Request ID: **RQ-2016-01-25-07**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

FL Dept. of Environmental Protection
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3319 Maguire Blvd., Suite 232
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 10-FEB-2016 14:05



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: Shady Brook @ 500m US of CR 35

Collection Date/Time: 01/25/2016 10:15

Field ID: G1CE0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1765325	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P297584	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P297774	
		Sulfate	3.8		mg SO4/L	P297779	
	SM 2120 B	Color (true)	94		PCU	P297545	
	SM 2320 B-97	Total Alkalinity	140	A	mg CaCO3/L	P298142	
	SM 2540 C-97	TDS	231		mg/L	P298281	
	SM 2540 D-97	TSS	2	I	mg/L	P298118	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P297675	
1765327	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P297939	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.89		mg N/L	P297737	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.077		mg N/L	P297803	
	EPA 365.1 Rev. 2.0	Total-P	0.036		mg P/L	P297763	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P297845	
1765329	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.025		mg P/L	P297549	

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: Lake Blue Cove @ 150m SW of Center

Collection Date/Time: 01/25/2016 11:29

Field ID: G4CE0022

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1765326	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P297584	
	EPA 300.0 Rev. 2.1	Chloride	2.7		mg Cl/L	P297774	
		Sulfate	0.20	U	mg SO4/L	P297779	
	SM 2120 B	Color (true)	9.4		PCU	P297545	
	SM 2320 B-97	Total Alkalinity	40		mg CaCO3/L	P298142	
	SM 2540 C-97	TDS	67		mg/L	P298281	
	SM 2540 D-97	TSS	3	I	mg/L	P298118	
	SM 4500 F-C-97	Fluoride	0.29		mg F/L	P297675	
1765328	EPA 350.1 Rev. 2.0	Ammonia-N	0.39		mg N/L	P297939	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P297737	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.44		mg N/L	P297803	
	EPA 365.1 Rev. 2.0	Total-P	0.27		mg P/L	P297763	
	SM 5310 B-00	Organic Carbon	6.3		mg C/L	P297845	
1765330	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.15		mg P/L	P297549	

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: P297584

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: P297774

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P297779

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P297939

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P297737

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P297803

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P297763

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297549

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

Reference Method: SM 2120 B
Batch ID: P297545

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P298142

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: P298281

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P298118

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P297675

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P297845

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: P297774

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P297779

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P297939

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P297737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P297803

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P297803

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P297763

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: P297549

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

Reference Method: SM 2320 B-97
Batch ID: P298142

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.7		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P297675

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	94 - 108

Reference Method: SM 5310 B-00
Batch ID: P297845

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P297774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765310	Chloride	106		P	90 - 110
1765312	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P297779

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765310	Sulfate	102		P	90 - 110
1765312	Sulfate	100		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P297939

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765361	Ammonia-N	99.3	99.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P297737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765317	Kjeldahl Nitrogen	103	93.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P297803

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765362	NO2NO3-N	97.6	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P297763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765317	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297549

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765329	O-Phosphate-P	99.2	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P297675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765265	Fluoride	96.4	97.6	P/P	94 - 107

Reference Method: SM 5310 B-00
Batch ID: P297845

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1765266	Organic Carbon	91.4	90.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P297584

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765311	Turbidity	2.67	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P297774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765310	Chloride	0.146	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P297779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765310	Sulfate	0.236	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P297939

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765361	Ammonia-N	0.540	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P297737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765317	Kjeldahl Nitrogen	10.2	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P297803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765362	NO2NO3-N	1.13	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P297763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765317	Total-P	0.144	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297549

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765329	O-Phosphate-P	0.724	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P297545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765307	Color (true)	0.0	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P298142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765325	Total Alkalinity	1.17	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P298281

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765285	TDS	6.28	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P297675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765265	Fluoride	1.02	Spike	P	0 - 3.7

Reference Method: SM 5310 B-00
Batch ID: P297845

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1765266	Organic Carbon	0.639	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: A67260
Included Lab Sample IDs: 1765325, 1765326

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A67261
Included Lab Sample IDs: 1765329, 1765330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	99.9	P/P	90 - 110
O-Phosphate-P	99.9	98.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A67277
Included Lab Sample IDs: 1765325, 1765326

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A67286

Included Lab Sample IDs: 1765325, 1765326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	102	P/P	90 - 110
Sulfate	99.7	96.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A67312

Included Lab Sample IDs: 1765325, 1765326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A67356

Included Lab Sample IDs: 1765327, 1765328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A67362

Included Lab Sample IDs: 1765328

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

Reference Method: SM 5310 B-00

Run ID: A67371

Included Lab Sample IDs: 1765327, 1765328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.2	93.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A67374

Included Lab Sample IDs: 1765327, 1765328

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A67378

Included Lab Sample IDs: 1765327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	99.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A67407

Included Lab Sample IDs: 1765327, 1765328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
 Run ID: A67407
 Included Lab Sample IDs: 1765327, 1765328

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

Reference Method: SM 2320 B-97
 Run ID: A67470
 Included Lab Sample IDs: 1765325, 1765326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.0	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				2.67	
EPA 300.0 Rev. 2.1	Chloride	104	106 104		0.146	
	Sulfate	101	102 100		0.236	
EPA 350.1 Rev. 2.0	Ammonia-N	98.8	99.3 99.9			0.540
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.9	103 93.0			10.2
EPA 353.2 Rev. 2.0	NO2NO3-N	101	97.6 99.0			1.13
EPA 365.1 Rev. 2.0	Total-P	100	104 104			0.144
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	99.2 100			0.724
SM 2120 B	Color (true)				0.0	
SM 2320 B-97	Total Alkalinity	99.7			1.17	
SM 2540 C-97	TDS				6.28	
SM 4500 F-C-97	Fluoride	96.9	96.4 97.6			1.02
SM 5310 B-00	Organic Carbon	94.0	91.4 90.8			0.639

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1765325, 1765326
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1765325, 1765326
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1765325, 1765326
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1765327, 1765328
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1765327, 1765328
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1765327, 1765328
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1765327, 1765328

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	1765329, 1765330
SM 2120 B / E31780	True Color measured at 450 nm	1765325, 1765326
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1765325, 1765326
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1765325, 1765326
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1765325, 1765326
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1765325, 1765326
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1765327, 1765328

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	01/26/2016			01/26/2016 15:26	Blanca Fach	1765325, 1765326
EPA 300.0 Rev. 2.1	01/26/2016			01/29/2016	Ping Hua	1765325, 1765326
EPA 350.1 Rev. 2.0	01/26/2016			02/02/2016	Diana M. Turner	1765327, 1765328
EPA 351.2 Rev. 2.0	01/26/2016	01/29/2016	Christopher Armour	02/01/2016	Bryan A. Werth	1765327, 1765328
EPA 353.2 Rev. 2.0	01/26/2016			01/29/2016	Diana M. Turner	1765327, 1765328
EPA 365.1 Rev. 2.0	01/26/2016	01/29/2016	Christopher Armour	01/29/2016	Lipi Saha	1765328
	01/26/2016	01/29/2016	Christopher Armour	02/01/2016	Lipi Saha	1765327
EPA 365.1 Rev. 2.0 dissolved	01/26/2016			01/26/2016 13:57	Julia Storbeck	1765329
	01/26/2016			01/26/2016 14:11	Julia Storbeck	1765330
SM 2120 B	01/26/2016			01/26/2016 14:06	Rochelle Y Jackson	1765325
	01/26/2016			01/26/2016 14:07	Rochelle Y Jackson	1765326
SM 2320 B-97	01/26/2016			02/02/2016	Dale L. Simmons	1765325, 1765326
SM 2540 C-97	01/26/2016			01/29/2016	Yijie Li	1765325, 1765326
SM 2540 D-97	01/26/2016			01/29/2016	Yijie Li	1765325, 1765326
SM 4500 F-C-97	01/26/2016			01/27/2016	Dale L. Simmons	1765325, 1765326
SM 5310 B-00	01/26/2016			01/29/2016	Sofia Elnemr	1765327, 1765328