

Chemical Analysis Report

SW-DIST-2016-08-04-02

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

Event Description: **RUN 8**
Request ID: **RQ-2016-08-01-28**
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: Stephen Clingerman

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 25-AUG-2016 16:00

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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: KLOSTERMAN CANAL N.

Collection Date/Time: 08/03/2016 10:00

Field ID: G5SW0039

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1821831	EPA 180.1 Rev. 2.0	Turbidity	8.1		NTU	P309220	
	EPA 300.0 Rev. 2.1	Chloride	280		mg Cl/L	P309732	
		Sulfate	76		mg SO4/L	P309942	
	SM 2120 B	Color (true)	78		PCU	P309234	
	SM 2320 B-97	Total Alkalinity	104		mg CaCO3/L	P309337	
	SM 2540 C-97	TDS	742		mg/L	P309852	
	SM 2540 D-97	TSS	13		mg/L	P309770	
	SM 4500 F-C-97	Fluoride	0.29		mg F/L	P309344	
1821833	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P309216	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P309640	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P309666	
	EPA 365.1 Rev. 2.0	Total-P	0.49		mg P/L	P309645	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P310029	
1821835	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.31		mg P/L	P309225	

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: JERRY BRANCH

Collection Date/Time: 08/03/2016 11:10

Field ID: G5SW0117

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1821832	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P309220	
	EPA 300.0 Rev. 2.1	Chloride	47		mg Cl/L	P309732	
		Sulfate	13		mg SO4/L	P309942	
	SM 2120 B	Color (true)	82		PCU	P309234	
	SM 2320 B-97	Total Alkalinity	78		mg CaCO3/L	P309337	
	SM 2540 C-97	TDS	220		mg/L	P309852	
	SM 2540 D-97	TSS	5	I	mg/L	P309770	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P309344	
1821834	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P309216	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P309640	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P309666	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P309645	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P310029	
1821836	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.098		mg P/L	P309225	

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: P309220

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: P309732

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309942

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309216

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309640

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309666

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309645

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309225

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

Reference Method: SM 2120 B
Batch ID: P309234

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P309337

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: P309852

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P309770

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P309344

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P310029

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: P309732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309216

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309666

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: P309666

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: P309645

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309225

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

Reference Method: SM 2320 B-97
Batch ID: P309337

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P309344

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P310029

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821866	Chloride	98.2		P	90 - 110
1821876	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821866	Sulfate	95.9		P	90 - 110
1823310	Sulfate	94.5		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P309216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821749	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P309640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821783	Kjeldahl Nitrogen	101	110	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P309666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821785	NO2NO3-N	95.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P309645

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821760	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P309225

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821750	O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Batch ID: P309344

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821748	Fluoride	99.2	99.8	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P310029

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821634	Organic Carbon	106	108	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P309220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821772	Turbidity	12.0	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821866	Chloride	0.110	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1823310	Sulfate	0.417	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821749	Ammonia-N	0.592	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821783	Kjeldahl Nitrogen	7.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821785	NO2NO3-N	1.03	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821760	Total-P	0.0700	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309225

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821750	O-Phosphate-P	0.327	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P309234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821779	Color (true)	18.1	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P309337

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821748	Total Alkalinity	0.579	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P309852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821779	TDS	0.988	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P309344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821748	Fluoride	0.519	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P310029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821634	Organic Carbon	1.24	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 350.1 Rev. 2.0
Run ID: A70951
Included Lab Sample IDs: 1821833, 1821834

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A70952
Included Lab Sample IDs: 1821831, 1821832

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: A70953
Included Lab Sample IDs: 1821835, 1821836

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	99.7	P/P	90 - 110
O-Phosphate-P	99.7	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A70955

Included Lab Sample IDs: 1821831, 1821832

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.5	98.7	P/P	90 - 115

Reference Method: SM 2320 B-97

Run ID: A70986

Included Lab Sample IDs: 1821831, 1821832

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A70986

Included Lab Sample IDs: 1821831, 1821832

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71078

Included Lab Sample IDs: 1821831, 1821832

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A71097

Included Lab Sample IDs: 1821833, 1821834

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A71124

Included Lab Sample IDs: 1821833, 1821834

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A71128

Included Lab Sample IDs: 1821833, 1821834

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71177

Included Lab Sample IDs: 1821831, 1821832

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A71177
Included Lab Sample IDs: 1821831, 1821832

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	98.2	95.9	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A71232
Included Lab Sample IDs: 1821833, 1821834

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	105	106	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				12.0	
EPA 300.0 Rev. 2.1	Chloride	96.5	98.2 99.1		0.110	
	Sulfate	94.3	94.5 95.9		0.417	
EPA 350.1 Rev. 2.0	Ammonia-N	105	100 101			0.592
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	101 110			7.10
EPA 353.2 Rev. 2.0	NO2NO3-N	104	95.2			1.03
EPA 365.1 Rev. 2.0	Total-P	104	102 102			0.0700
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	99.8 100			0.327
SM 2120 B	Color (true)				18.1	
SM 2320 B-97	Total Alkalinity	104			0.579	
SM 2540 C-97	TDS				0.988	
SM 4500 F-C-97	Fluoride	99.9	99.2 99.8			0.519
SM 5310 B-00	Organic Carbon	103	106 108			1.24

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1821831, 1821832
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1821831, 1821832
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1821831, 1821832
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1821833, 1821834
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1821833, 1821834
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1821833, 1821834
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1821833, 1821834
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1821835, 1821836

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
SM 2120 B / E31780	True Color measured at 450 nm	1821831, 1821832
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1821831, 1821832
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1821831, 1821832
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1821831, 1821832
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1821831, 1821832
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1821833, 1821834

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	08/04/2016			08/04/2016 15:00	Sima Feizi	1821831, 1821832
EPA 300.0 Rev. 2.1	08/04/2016			08/12/2016	Elisa J Lutz	1821831, 1821832
	08/04/2016			08/17/2016	Ping Hua	1821831, 1821832
EPA 350.1 Rev. 2.0	08/04/2016			08/04/2016	Julie Michelle Frank	1821833, 1821834
EPA 351.2 Rev. 2.0	08/04/2016	08/12/2016	Sofia Elnemr	08/15/2016	Virginia P. Brown	1821833, 1821834
EPA 353.2 Rev. 2.0	08/04/2016			08/11/2016	Peter D. Kaus	1821833, 1821834
EPA 365.1 Rev. 2.0	08/04/2016	08/12/2016	Vijayalakshmi Reddy	08/15/2016	Lipi Saha	1821833, 1821834
EPA 365.1 Rev. 2.0 dissolved	08/04/2016			08/04/2016 15:23	Julia Storbeck	1821836
	08/04/2016			08/04/2016 15:37	Julia Storbeck	1821835
SM 2120 B	08/04/2016			08/04/2016 17:40	Rochelle Y Jackson	1821831
	08/04/2016			08/04/2016 17:41	Rochelle Y Jackson	1821832
SM 2320 B-97	08/04/2016			08/06/2016	Dale L. Simmons	1821831, 1821832
SM 2540 C-97	08/04/2016			08/08/2016	Sima Feizi	1821831, 1821832
SM 2540 D-97	08/04/2016			08/08/2016	Sima Feizi	1821831, 1821832
SM 4500 F-C-97	08/04/2016			08/06/2016	Dale L. Simmons	1821831, 1821832
SM 5310 B-00	08/04/2016			08/18/2016	Sofia Elnemr	1821833, 1821834