

Chemical Analysis Report

CEN-DIST-2016-05-17-01

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

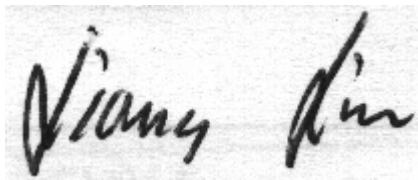
Event Description: **Bear/Florence+LVI**
Request ID: **RQ-2016-05-16-65**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-JUN-2016 16:43

A handwritten signature in black ink, appearing to read "Liang Lin", is shown 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: G1CE0002

Collection Date/Time: 05/16/2016 12:20

Field ID: G1CE0002

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1799227	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P304592	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P304797	
		Sulfate	0.72		mg SO4/L	P304800	
	SM 2120 B	Color (true)	220		PCU	P304460	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P304848	
	SM 2540 C-97	TDS	61		mg/L	P304895	
	SM 2540 D-97	TSS	3	I	mg/L	P304889	
	SM 4500 F-C-97	Fluoride	0.050	I	mg F/L	P305056	
1799229	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P304946	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P305017	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304711	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P305188	
	SM 5310 B-00	Organic Carbon	27		mg C/L	P305076	
1799231	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P304449	

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: G1CE0006

Collection Date/Time: 05/16/2016 11:20

Field ID: G1CE0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1799228	EPA 180.1 Rev. 2.0	Turbidity	5.3		NTU	P304592	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P304797	
		Sulfate	16		mg SO4/L	P304800	
	SM 2120 B	Color (true)	13	A	PCU	P304460	
	SM 2320 B-97	Total Alkalinity	92		mg CaCO3/L	P304848	
	SM 2540 C-97	TDS	180	A	mg/L	P304895	
	SM 2540 D-97	TSS	7	I	mg/L	P304889	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P305056	
1799230	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P304947	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P305017	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304711	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P305188	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P305076	
1799232	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P304449	

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: P304592

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: P304797

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304800

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304946

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304947

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305017

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304711

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305188

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304449

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

Reference Method: SM 2120 B
Batch ID: P304460

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P304848

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P304895

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P304889

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P305056

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P305076

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: P304797

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304946

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304947

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P304947

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P305017

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P304711

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: P305188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P304449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.2		P	90 - 110

Reference Method: SM 2320 B-97
 Batch ID: P304848

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P305056

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.5		P	92 - 103

Reference Method: SM 5310 B-00
 Batch ID: P305076

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P304797

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304797

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799328	Chloride	99.8		P	90 - 110
1799379	Chloride	98.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799328	Sulfate	96.3		P	90 - 110
1799379	Sulfate	97.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798813	Ammonia-N	98.5	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799230	Ammonia-N	99.6	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305017

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799155	Kjeldahl Nitrogen	96.9	94.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304711

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798926	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799127	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799157	O-Phosphate-P	98.7	99.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P305056

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798546	Fluoride	96.4	97.3	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P305076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799153	Organic Carbon	99.1	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P304592

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799149	Turbidity	0.430	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304797

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799379	Chloride	0.0158	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799379	Sulfate	2.03	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798813	Ammonia-N	1.56	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799230	Ammonia-N	0.756	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799155	Kjeldahl Nitrogen	2.46	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304711

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798926	NO2NO3-N	0.758	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799127	Total-P	1.38	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799157	O-Phosphate-P	0.460	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P304460

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799228	Color (true)	2.71	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798546	Total Alkalinity	0.220	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P304895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799228	TDS	5.01	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P305056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798546	Fluoride	0.473	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P305076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799153	Organic Carbon	0.915	Spike	P	0 - 20

Quality Assurance Report Precision

* 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: A69523

Included Lab Sample IDs: 1799231, 1799232

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.8	99.7	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A69527

Included Lab Sample IDs: 1799227, 1799228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.9	96.0	P/P	90 - 115
Color (true)	98.0	98.9	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A69574

Included Lab Sample IDs: 1799227, 1799228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A69597

Included Lab Sample IDs: 1799229, 1799230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO ₂ NO ₃ -N	101	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A69620

Included Lab Sample IDs: 1799227, 1799228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Sulfate	99.1	96.2	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A69641

Included Lab Sample IDs: 1799227, 1799228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.6	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A69674

Included Lab Sample IDs: 1799229, 1799230

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: A69674
 Included Lab Sample IDs: 1799229, 1799230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	99.0	P/P	90 - 110
Ammonia-N	99.2	98.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Run ID: A69701
 Included Lab Sample IDs: 1799227, 1799228

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	99.1	P/P	90 - 110

Reference Method: SM 5310 B-00
 Run ID: A69711
 Included Lab Sample IDs: 1799229, 1799230

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

Reference Method: EPA 351.2 Rev. 2.0
 Run ID: A69745
 Included Lab Sample IDs: 1799229, 1799230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.0	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A69793
 Included Lab Sample IDs: 1799229, 1799230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.2	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				0.430	
EPA 300.0 Rev. 2.1	Chloride	99.6	98.5 99.8		0.0158	
	Sulfate	96.6	97.0 96.3		2.03	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	98.5 101			1.56
	Ammonia-N	98.6	99.6 98.7			0.756
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	96.9 94.0			2.46
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100			0.758
EPA 365.1 Rev. 2.0	Total-P	99.9	103 101			1.38
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.2	98.7 99.2			0.460
SM 2120 B	Color (true)				2.71	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
SM 2320 B-97	Total Alkalinity	102				0.220	
SM 2540 C-97	TDS					5.01	
SM 4500 F-C-97	Fluoride	96.5	96.4	97.3			0.473
SM 5310 B-00	Organic Carbon	100	99.1	100			0.915

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1799227, 1799228
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1799227, 1799228
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1799227, 1799228
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1799229, 1799230
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1799229, 1799230
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1799229, 1799230
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1799229, 1799230
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1799231, 1799232
SM 2120 B / E31780	True Color measured at 450 nm	1799227, 1799228
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1799227, 1799228
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1799227, 1799228
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1799227, 1799228
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1799227, 1799228
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1799229, 1799230

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	05/17/2016			05/17/2016 18:12	Chrisoulla Rakowski	1799227, 1799228
EPA 300.0 Rev. 2.1	05/17/2016			05/21/2016	Elisa J Lutz	1799227, 1799228
EPA 350.1 Rev. 2.0	05/17/2016			05/24/2016	Diana M. Turner	1799229, 1799230
EPA 351.2 Rev. 2.0	05/17/2016	05/25/2016	Sofia Elnemr	05/26/2016	Christopher Armour	1799229, 1799230
EPA 353.2 Rev. 2.0	05/17/2016			05/20/2016	Peter D. Kaus	1799229, 1799230
EPA 365.1 Rev. 2.0	05/17/2016	05/27/2016	Vijayalakshmi Reddy	06/01/2016	Rochelle Y Jackson	1799229, 1799230
EPA 365.1 Rev. 2.0 dissolved	05/17/2016			05/17/2016 15:31	Julia Storbeck	1799231
	05/17/2016			05/17/2016 15:32	Julia Storbeck	1799232
SM 2120 B	05/17/2016			05/17/2016 14:12	Rochelle Y Jackson	1799228
	05/17/2016			05/17/2016 14:47	Rochelle Y Jackson	1799227
SM 2320 B-97	05/17/2016			05/23/2016	Dale L. Simmons	1799227, 1799228
SM 2540 C-97	05/17/2016			05/18/2016	Yijie Li	1799227, 1799228
SM 2540 D-97	05/17/2016			05/18/2016	Yijie Li	1799227, 1799228
SM 4500 F-C-97	05/17/2016			05/25/2016	Dale L. Simmons	1799227, 1799228
SM 5310 B-00	05/17/2016			05/25/2016	Diana M. Turner	1799229, 1799230