

Chemical Analysis Report

NE-DIST-2016-05-05-01

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

Event Description: **Nassau Middle**
Request ID: **RQ-2016-05-02-28**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

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Certified by: Colin Wright, Environmental Administrator

Date Certified: 01-JUN-2016 12:54

A handwritten signature in black ink, appearing to read "Colin Wright", is written on a light-colored rectangular 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: 19010063 Brandy Branch @ CR121

Collection Date/Time: 05/04/2016 10:00

Field ID: 19010063 Brandy Branch @ CR121

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795994	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P303664	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P304287	
		Sulfate	1.6		mg SO4/L	P304290	
	SM 2120 B	Color (true)	470		PCU	P303616	
	SM 2320 B-97	Total Alkalinity	11		mg CaCO3/L	P304240	
	SM 2540 C-97	TDS	117		mg/L	P304453	
	SM 2540 D-97	TSS	4	I	mg/L	P304385	
	SM 4500 F-C-97	Fluoride	0.049	I	mg F/L	P304241	
1795995	EPA 350.1 Rev. 2.0	Ammonia-N	0.70		mg N/L	P304223	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P304504	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P304261	
	EPA 365.1 Rev. 2.0	Total-P	0.28		mg P/L	P304605	
	SM 5310 B-00	Organic Carbon	41		mg C/L	P304749	
1795996	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.20		mg P/L	P303642	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 104 umhos/cm.

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

Sample Location: FIELD BLANK

Collection Date/Time: 05/04/2016 10:05

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795997	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P304091	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P304504	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304261	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P304605	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P304749	
1795998	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303642	
1795999	EPA 300.0 Rev. 2.1	Sulfate	0.20	U	mg SO4/L	P304558	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0: Total-P: The result was confirmed on 05/26/2016.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P303664

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P304287

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304558

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304091

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304223

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304261

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303642

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

Reference Method: SM 2120 B
Batch ID: P303616

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P304240

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

Reference Method: SM 2540 C-97
Batch ID: P304453

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P304385

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P304749

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: P304287

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: P304290

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304558

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304091

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: P304091

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304223

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: P304504

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: P304261

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: P304605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.4		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303642

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

Reference Method: SM 2320 B-97
Batch ID: P304240

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P304241

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

Reference Method: SM 5310 B-00
Batch ID: P304749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795772	Chloride	95.1		P	90 - 110
1795779	Chloride	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795772	Sulfate	93.5		P	90 - 110
1795779	Sulfate	94.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304558

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1797204	Sulfate	94.8		P	90 - 110
1797327	Sulfate	96.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796015	Ammonia-N	94.6	95.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796828	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795788	Kjeldahl Nitrogen	96.9	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304261

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796015	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795787	Total-P	99.3	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796026	O-Phosphate-P	99.3	99.9	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796172	Fluoride	96.6	97.9	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P304749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795787	Organic Carbon	95.4	98.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P303664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795989	Turbidity	6.42	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795772	Chloride	0.0368	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795772	Sulfate	2.96	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304558

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1797327	Sulfate	5.61	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796015	Ammonia-N	0.839	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796828	Ammonia-N	1.01	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795788	Kjeldahl Nitrogen	2.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796015	NO2NO3-N	0.421	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795787	Total-P	1.65	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796026	O-Phosphate-P	0.576	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P303616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796004	Color (true)	0.544	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304240

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796172	Total Alkalinity	0.109	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P304453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796004	TDS	8.33	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796172	Fluoride	0.959	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P304749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795787	Organic Carbon	2.20	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: A69297
Included Lab Sample IDs: 1795994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A69300
Included Lab Sample IDs: 1795996, 1795998

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A69305
Included Lab Sample IDs: 1795994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	100	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A69423
Included Lab Sample IDs: 1795994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.0	100	P/P	90 - 110
Sulfate	98.2	98.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69427
Included Lab Sample IDs: 1795997

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: A69427

Included Lab Sample IDs: 1795997

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.1	95.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A69447

Included Lab Sample IDs: 1795995

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

Reference Method: SM 2320 B-97

Run ID: A69463

Included Lab Sample IDs: 1795994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A69463

Included Lab Sample IDs: 1795994

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A69466

Included Lab Sample IDs: 1795995, 1795997

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A69555

Included Lab Sample IDs: 1795999

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	97.8	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69582

Included Lab Sample IDs: 1795995, 1795997

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.4	95.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69598

Included Lab Sample IDs: 1795995

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

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A69610

Included Lab Sample IDs: 1795995, 1795997

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69622

Included Lab Sample IDs: 1795997

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	97.8	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				6.42	
EPA 300.0 Rev. 2.1	Chloride	96.5	95.1 96.1		0.0368	
	Sulfate	94.0	93.5 94.3		2.96	
	Sulfate	97.4	96.5 94.8		5.61	
EPA 350.1 Rev. 2.0	Ammonia-N	94.6	94.6 95.8			0.839
	Ammonia-N	101	101 102			1.01
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	96.9 102			2.95
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100 101			0.421
EPA 365.1 Rev. 2.0	Total-P	97.4	99.3 101			1.65
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	99.3 99.9			0.576
SM 2120 B	Color (true)				0.544	
SM 2320 B-97	Total Alkalinity	101			0.109	
SM 2540 C-97	TDS				8.33	
SM 4500 F-C-97	Fluoride	96.5	96.6 97.9			0.959
SM 5310 B-00	Organic Carbon	99.6	95.4 98.8			2.20

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1795994
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1795994
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1795994, 1795999
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1795995, 1795997
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1795995, 1795997
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1795995, 1795997
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1795995, 1795997

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1795996, 1795998
SM 2120 B / E31780	True Color measured at 450 nm	1795994
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1795994
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1795994
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1795994
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1795994
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1795995, 1795997

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	05/05/2016			05/05/2016 16:25	Blanca Fach	1795994
EPA 300.0 Rev. 2.1	05/05/2016			05/12/2016	Elisa J Lutz	1795994
	05/05/2016			05/18/2016	Elisa J Lutz	1795999
EPA 350.1 Rev. 2.0	05/05/2016			05/11/2016	Diana M. Turner	1795997
	05/05/2016			05/12/2016	Diana M. Turner	1795995
EPA 351.2 Rev. 2.0	05/05/2016	05/18/2016	Sofia Elnemr	05/19/2016	Vijayalakshmi Reddy	1795995, 1795997
EPA 353.2 Rev. 2.0	05/05/2016			05/13/2016	Peter D. Kaus	1795995, 1795997
EPA 365.1 Rev. 2.0	05/05/2016	05/19/2016	Vijayalakshmi Reddy	05/20/2016	Lipi Saha	1795995
	05/05/2016	05/19/2016	Vijayalakshmi Reddy	05/23/2016	Lipi Saha	1795997
EPA 365.1 Rev. 2.0 dissolved	05/05/2016			05/05/2016 15:50	Julia Storbeck	1795998
	05/05/2016			05/05/2016 16:32	Julia Storbeck	1795996
SM 2120 B	05/05/2016			05/05/2016 13:45	Rochelle Y Jackson	1795994
SM 2320 B-97	05/05/2016			05/12/2016	Dale L. Simmons	1795994
SM 2540 C-97	05/05/2016			05/09/2016	Sima Feizi	1795994
SM 2540 D-97	05/05/2016			05/09/2016	Sima Feizi	1795994
SM 4500 F-C-97	05/05/2016			05/12/2016	Dale L. Simmons	1795994
SM 5310 B-00	05/05/2016			05/21/2016	Rochelle Y Jackson	1795995, 1795997