

Chemical Analysis Report

CEN-DIST-2016-02-19-02

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

Event Description: **Lk Jackson/Jackson Canal**

Request ID: **RQ-2016-02-15-80**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

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FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 10-MAR-2016 12:16



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: JACKSON CANAL

Collection Date/Time: 02/18/2016 11:20

Field ID: G4CE0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1773114	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P298938	
	EPA 300.0 Rev. 2.1	Chloride	20	A	mg Cl/L	P299030	
		Sulfate	2.1	A	mg SO4/L	P299031	
	SM 2120 B	Color (true)	140	A	PCU	P298924	
	SM 2320 B-97	Total Alkalinity	24		mg CaCO3/L	P299659	
	SM 2540 C-97	TDS	83		mg/L	P299490	
	SM 2540 D-97	TSS	4	I	mg/L	P299427	
	SM 4500 F-C-97	Fluoride	0.080	I	mg F/L	P299323	
1773116	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P299629	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P299347	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P299464	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P299357	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P299307	
1773118	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P298928	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: LAKE JACKSON

Collection Date/Time: 02/18/2016 10:30

Field ID: G4CE0053

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1773115	EPA 180.1 Rev. 2.0	Turbidity	0.80		NTU	P298938	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P299030	
		Sulfate	1.5		mg SO4/L	P299031	
	SM 2120 B	Color (true)	270		PCU	P298924	
	SM 2320 B-97	Total Alkalinity	11		mg CaCO3/L	P299659	
	SM 2540 C-97	TDS	89		mg/L	P299490	
	SM 2540 D-97	TSS	2	U	mg/L	P299427	
	SM 4500 F-C-97	Fluoride	0.054	I	mg F/L	P299323	
1773117	EPA 350.1 Rev. 2.0	Ammonia-N	0.051		mg N/L	P299629	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P299399	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P299464	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P299357	
	SM 5310 B-00	Organic Carbon	26		mg C/L	P299307	
1773119	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P298928	

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: P298938

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P298938

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299030

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299031

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P299629

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299347

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299399

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299464

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299357

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P298928

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P298924

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P299659

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

Reference Method: SM 2540 C-97
Batch ID: P299490

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P299427

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P299323

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P299307

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: P299030

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299031

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P299629

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: P299629

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: P299347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299464

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: P299357

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P298928

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

Reference Method: SM 2320 B-97
Batch ID: P299659

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

Reference Method: SM 4500 F-C-97
Batch ID: P299323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	94 - 108

Reference Method: SM 5310 B-00
Batch ID: P299307

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773114	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299031

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773114	Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P299629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773156	Ammonia-N	100	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773117	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773133	NO2NO3-N	96.2	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299357

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773107	Total-P	95.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P298928

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773162	O-Phosphate-P	98.0	99.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P299323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773220	Fluoride	98.7	98.7	P/P	94 - 107

Reference Method: SM 5310 B-00
Batch ID: P299307

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1773117	Organic Carbon	99.6		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P298938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773072	Turbidity	2.91	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773114	Chloride	0.119	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299031

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773114	Sulfate	2.16	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P299629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773156	Ammonia-N	1.31	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773073	Kjeldahl Nitrogen	0.320	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773117	Kjeldahl Nitrogen	0.502	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773133	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299357

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773107	Total-P	3.29	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P298928

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773162	O-Phosphate-P	1.35	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P298924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773114	Color (true)	2.60	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P299659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773220	Total Alkalinity	0.775	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P299490

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773132	TDS	2.34	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P299323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773220	Fluoride	0.0	Spike	P	0 - 3.7

Reference Method: SM 5310 B-00
Batch ID: P299307

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1773117	Organic Carbon	0.560	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: A67701
Included Lab Sample IDs: 1773114, 1773115

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.5	99.7	P/P	90 - 115
Color (true)	99.7	100	P/P	90 - 115

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A67702

Included Lab Sample IDs: 1773118, 1773119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	98.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A67706

Included Lab Sample IDs: 1773114, 1773115

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A67740

Included Lab Sample IDs: 1773114, 1773115

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.5	101	P/P	90 - 110
Sulfate	96.7	98.5	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A67849

Included Lab Sample IDs: 1773116, 1773117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.3	96.7	P/P	90 - 110
Organic Carbon	96.7	95.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A67854

Included Lab Sample IDs: 1773114, 1773115

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A67899

Included Lab Sample IDs: 1773116, 1773117

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A67903

Included Lab Sample IDs: 1773116, 1773117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A67925

Included Lab Sample IDs: 1773116

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A67925

Included Lab Sample IDs: 1773116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.3	95.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A67955

Included Lab Sample IDs: 1773116, 1773117

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

Reference Method: SM 2320 B-97

Run ID: A67973

Included Lab Sample IDs: 1773114, 1773115

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A68015

Included Lab Sample IDs: 1773117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.7	93.8	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				2.91	
EPA 300.0 Rev. 2.1	Chloride	101	100		0.119	
	Sulfate	98.5	99.6		2.16	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	100	97.9		1.31
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.2				0.320
	Kjeldahl Nitrogen	95.7	106	107		0.502
EPA 353.2 Rev. 2.0	NO2NO3-N	102	96.2	96.7		0.506
EPA 365.1 Rev. 2.0	Total-P	97.9	95.5	99.0		3.29
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	98.0	99.7		1.35
SM 2120 B	Color (true)				2.60	
SM 2320 B-97	Total Alkalinity	105			0.775	
SM 2540 C-97	TDS				2.34	
SM 4500 F-C-97	Fluoride	97.1	98.7	98.7		0.0
SM 5310 B-00	Organic Carbon	97.6	99.6			0.560

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1773114, 1773115
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1773114, 1773115
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1773114, 1773115
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1773116, 1773117
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1773116, 1773117
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1773116, 1773117
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1773116, 1773117
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1773118, 1773119
SM 2120 B / E31780	True Color measured at 450 nm	1773114, 1773115
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1773114, 1773115
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1773114, 1773115
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1773114, 1773115
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1773114, 1773115
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1773116, 1773117

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	02/19/2016			02/19/2016 15:35	Sima Feizi	1773114, 1773115
EPA 300.0 Rev. 2.1	02/19/2016			02/22/2016	Ping Hua	1773114, 1773115
EPA 350.1 Rev. 2.0	02/19/2016			03/02/2016	Diana M. Turner	1773116, 1773117
EPA 351.2 Rev. 2.0	02/19/2016	02/26/2016	Christopher Armour	03/01/2016	Rochelle Y Jackson	1773116
	02/19/2016	02/29/2016	Christopher Armour	03/02/2016	Rochelle Y Jackson	1773117
EPA 353.2 Rev. 2.0	02/19/2016			02/29/2016	Diana M. Turner	1773116, 1773117
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