

Chemical Analysis Report

WTRSHD-MGT-2012-03-09-01

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

Event Description: **SPRG1201**
Request ID: **RQ-2012-03-05-13**
Customer: **WTRSHD-MGT**
Project ID: **SPG_QTR_WQ**

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Date Certified: 02-APR-2012 13:54



Abbreviations and data remark codes

CERT # - NELAP (National Environmental Laboratory Accreditation Program) Certification Number of the laboratory that performed the analysis.

LCS – Laboratory Control Sample; in the QC Failures column, this notation indicates a batch recovery failure.

MS – Matrix Spike; in the QC Failures column, this notation indicates a batch recovery failure.

RPD – Relative Percent Difference; in the QC Failures column, this notation indicates a batch failure for precision.

CCV – Continuing Calibration Verification; in the QC Failures column, this notation indicates a failure of the calibration verification check sample.

RSD – Relative Standard Deviation expressed as a percentage.

SMP – Sample.

** - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.

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

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).

Precision is reported as relative percent difference unless otherwise noted.

Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

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.

All sample collection performed by Bureau of Laboratories staff followed the field Standard Operating Procedures adopted by reference in Rule 62-160 FAC unless otherwise noted.

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.

Results for NELAP accredited tests contained in this report meet the requirements specified by the National Environmental Laboratory Accreditation Conference (NELAC). All samples received were in acceptable condition and met NELAC requirements unless otherwise noted. Results generated in this report pertain to the samples collected and submitted for analysis.

Job: TLH-2012-03-09-08

Group: Nutrients

Job: TLH-2012-03-09-09

Group: Metals

Sample Location: RECEPTION HALL SPG.**Collection Date/Time: 03/08/2012 03:16 PM****Field ID: 9721****Matrix: W-OTHER**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1414306	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P237172	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P237505	
		Sulfate	74		mg SO4/L	P237506	
		Color (true)	2.5	U	PCU	P237113	
	SM 2320 B-97	Alkalinity	173		mg CaCO3/L	P237522	
	SM 2540 C-97	TDS	311		mg/L	P237465	
1414308	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P237175	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P237295	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.6		mg N/L	P237238	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P237516	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P237200	
1414310	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.040		mg P/L	P237106	
1414312	EPA 200.7 Rev. 4.4	Boron	22	I	ug/L	P237746	
		Calcium	82.5	A	mg/L	P237746	
		Magnesium	12.9	A	mg/L	P237746	
		Potassium	0.85	I	mg/L	P237746	
		Sodium	7.1	A	mg/L	P237746	

Ref. Method and Comment:

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

Sample Location: SILVER SPRING MAIN**Collection Date/Time: 03/08/2012 02:32 PM****Field ID: 9720****Matrix: W-OTHER**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1414305	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P237172	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P237505	
		Sulfate	60		mg SO4/L	P237506	
		Color (true)	2.5	U	PCU	P237113	
	SM 2320 B-97	Alkalinity	193		mg CaCO3/L	P237522	
	SM 2540 C-97	TDS	306		mg/L	P237465	
1414307	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P237174	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.12	I	mg N/L	P237295	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.3		mg N/L	P237238	
	EPA 365.1 Rev. 2.0	Total-P	0.043		mg P/L	P237516	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P237199	
1414309	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P237106	
1414311	EPA 200.7 Rev. 4.4	Boron	22	I	ug/L	P237746	
		Calcium	83.7		mg/L	P237746	
		Magnesium	11.7		mg/L	P237746	
		Potassium	0.82	I	mg/L	P237746	
		Sodium	7.2		mg/L	P237746	

Field ID: 9720

Matrix: W-OTHER

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
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Ref. Method and Comment:

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P237172

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P237746

Component	Result	Code	Units
Boron	15	U	ug/L
Calcium	0.075	U	mg/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237505

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237506

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237174

Component	Result	Code	Units
Ammonia-N	0.010	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237175

Component	Result	Code	Units
Ammonia-N	0.010	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P237295

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P237238

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P237516

Component	Result	Code	Units
Total-P	0.004	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237106

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

Reference Method: SM 2120 B

Batch ID: P237113

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97

Batch ID: P237522

Component	Result	Code	Units
Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97

Batch ID: P237465

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 5310 B-00

Batch ID: P237199

Component	Result	Code	Units
Organic Carbon	1.0	U	mg C/L

Reference Method: SM 5310 B-00

Batch ID: P237200

Component	Result	Code	Units
Organic Carbon	1.0	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P237746

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

Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P237746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Boron	97.9		P	85 - 115
Calcium	103		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	103		P	85 - 115
Sodium	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237505

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237174

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237175

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: P237295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P237238

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: P237516

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237106

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237106

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

Reference Method: SM 2320 B-97

Batch ID: P237522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alkalinity	101		P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P237199

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.0		P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P237200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P237746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414312	Boron	102	102	P/P	80 - 120
1414312	Magnesium	99.5		P	80 - 120
1414312	Potassium	104	99.8	P/P	80 - 120
1414312	Sodium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414301	Chloride	99.0		P	90 - 110
1414333	Chloride	98.2	97.9	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414301	Sulfate	98.5		P	90 - 110
1414333	Sulfate	97.2	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237175

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414323	Ammonia-N	106	101	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P237295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414323	Kjeldahl Nitrogen	95.9	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P237238

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414302	NO2NO3-N	101	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P237516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414324	Total-P	105	106	P/P	90 - 110

Reference Method: SM 5310 B-00

Batch ID: P237199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414068	Organic Carbon	97.2	95.6	P/P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P237200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1414323	Organic Carbon	93.8	95.0	P/P	85 - 115

Quality Assurance Report

Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P237172

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414301	Turbidity	8.48	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P237746

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414312	Boron	0.249	Spike	P	0 - 20
1414312	Calcium	0.325	Sample	P	0 - 20
1414312	Magnesium	0.959	Sample	P	0 - 20
1414312	Potassium	3.71	Spike	P	0 - 20
1414312	Sodium	0.460	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237505

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414333	Chloride	0.203	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P237506

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414333	Sulfate	0.166	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237174

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414142	Ammonia-N	0.655	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P237175

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414323	Ammonia-N	3.91	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P237295

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414323	Kjeldahl Nitrogen	4.20	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P237238

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414302	NO2NO3-N	3.02	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P237516

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414324	Total-P	0.936	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237106

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414351	O-Phosphate-P	1.62	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B

Batch ID: P237113

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414321	Color (true)	1.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P237522

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1415392	Alkalinity	0.000546	Sample	P	0 - 20
1415393	Alkalinity	0.462	Sample	P	0 - 20

Reference Method: SM 2540 C-97

Batch ID: P237465

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414743	TDS	0.200	Sample	P	0 - 10

Reference Method: SM 5310 B-00

Batch ID: P237199

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414068	Organic Carbon	0.824	Spike	P	0 - 20

Reference Method: SM 5310 B-00

Batch ID: P237200

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1414323	Organic Carbon	0.785	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 365.1 Rev. 2.0 dissolved

Run ID: A43986

Included Lab Sample IDs: 1414309, 1414310

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	97.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A43989

Included Lab Sample IDs: 1414305, 1414306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.7	97.8	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A44009

Included Lab Sample IDs: 1414305, 1414306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A44011

Included Lab Sample IDs: 1414307, 1414308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	104	P/P	90 - 110
Ammonia-N	105	103	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A44023

Included Lab Sample IDs: 1414307, 1414308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	95.8	P/P	85 - 115
Organic Carbon	97.6	96.4	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A44048

Included Lab Sample IDs: 1414307, 1414308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	94.8	95.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A44061

Included Lab Sample IDs: 1414305, 1414306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	106	106	P/P	90 - 110
Sulfate	105	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A44074

Included Lab Sample IDs: 1414307, 1414308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.4	91.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A44161

Included Lab Sample IDs: 1414307, 1414308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.6	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A44165

Included Lab Sample IDs: 1414305, 1414306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alkalinity	96.8	97.5	P/P	85 - 115
Alkalinity	97.5	98.4	P/P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A44265

Included Lab Sample IDs: 1414311, 1414312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	97.3	97.8	P/P	90 - 110
Calcium	102	101	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	102	101	P/P	90 - 110
Sodium	99.5	98.8	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						8.48	
EPA 200.7 Rev. 4.4	Boron	97.9		102	102			0.249
	Calcium	103					0.325	
	Magnesium	102		99.5			0.959	
	Potassium	103		104	99.8			3.71
	Sodium	100		101			0.460	
EPA 300.0 Rev. 2.1	Chloride	101		99.0	98.2	97.9		0.203
	Sulfate	103		98.5	97.2	97.0		0.166
EPA 350.1 Rev. 2.0	Ammonia-N	102						0.655
	Ammonia-N	101		106	101			3.91
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.0		95.9	102			4.20
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102		101	98.0			3.02
EPA 365.1 Rev. 2.0	Total-P	107		105	106			0.936
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100						1.62
SM 2120 B	Color (true)						1.38	
SM 2320 B-97	Alkalinity	101					0.462	
							0.0005	
SM 2540 C-97	TDS						0.200	
SM 5310 B-00	Organic Carbon	96.0		97.2	95.6			0.824
	Organic Carbon	96.2		93.8	95.0			0.785

Reference Method Descriptions

Method / NELAC Cert.

EPA 180.1 Rev. 2.0 / E31780

EPA 200.7 Rev. 4.4 / E31780

Description

Turbidity in aqueous matrices

Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Reference Method Descriptions

Method / NELAC Cert. #	Description
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L
SM 2120 B / E31780	True Color measured at 450 nm or Apparent Color
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices

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	03/09/2012			03/09/2012 14:50	Blanca Fach	1414305, 1414306
EPA 200.7 Rev. 4.4	03/09/2012	03/22/2012	Elliott D. Healy	03/26/2012	Joshua Ayres	1414311, 1414312
EPA 300.0 Rev. 2.1	03/09/2012			03/16/2012	Gary Dearman	1414305, 1414306
EPA 350.1 Rev. 2.0	03/09/2012			03/13/2012	Diana M. Dunbar	1414307, 1414308
EPA 351.2 Rev. 2.0	03/09/2012	03/13/2012	Bryan A. Werth	03/14/2012	Christopher Armour	1414307, 1414308
EPA 353.2 Rev. 2.0	03/09/2012			03/14/2012	Diana M. Dunbar	1414307, 1414308
EPA 365.1 Rev. 2.0	03/09/2012	03/15/2012	Megan E. Faircloth	03/20/2012	Megan E. Faircloth	1414307, 1414308
EPA 365.1 Rev. 2.0 dissolved	03/09/2012			03/09/2012 15:08	Pallavi R. Gadwal	1414309
	03/09/2012			03/09/2012 15:09	Pallavi R. Gadwal	1414310
SM 2120 B	03/09/2012			03/09/2012 15:39	Rochelle Y Jackson	1414305
	03/09/2012			03/09/2012 15:40	Rochelle Y Jackson	1414306
SM 2320 B-97	03/09/2012			03/21/2012	Dale L. Simmons	1414305, 1414306
SM 2540 C-97	03/09/2012			03/14/2012	Sima Feizi	1414305, 1414306
SM 5310 B-00	03/09/2012			03/13/2012	Rochelle Y Jackson	1414307, 1414308