

Chemical Analysis Report

WTRSHD-MGT-2012-06-01-01

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

Event Description: **SPRG1204**
Request ID: **RQ-2012-05-07-38**
Customer: **WTRSHD-MGT**
Project ID: **SPG_QTR_WQ**

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Date Certified: 27-JUN-2012 09:55



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.

SUR – Surrogate; in the QC Failures column, this notation indicates a recovery failure for the associated surrogate.

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).

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.

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-2012-06-01-50

Group: Nutrients

Job: TLH-2012-06-01-51

Group: Metals

Job: TLH-2012-06-01-52

Group: Pesticides

Sample Location: 011403**Collection Date/Time: 05/30/2012 04:51 PM****Field ID: WEKIWA SPRINGS****Matrix: W-SURF-FRH**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1433011	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P240462	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P240816	
		Sulfate	22		mg SO4/L	P240817	
	SM 2120 B	Color (true)	2.5	U	PCU	P240535	
	SM 2320 B-97	Alkalinity	134		mg CaCO3/L	P240552	
	SM 2540 C-97	TDS	208		mg/L	P240749	
1433013	EPA 350.1 Rev. 2.0	Ammonia-N	0.015	I	mg N/L	P240731	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.13	I	mg N/L	P240609	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.72		mg N/L	P240739	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P240792	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240659	
1433015	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11	Q	mg P/L	P240910	
1433017	EPA 200.7 Rev. 4.4	Boron	36	I	ug/L	P240642	
		Calcium	42.7		mg/L	P240642	
		Magnesium	12.5		mg/L	P240642	
		Potassium	1.6		mg/L	P240642	
		Sodium	10.2		mg/L	P240642	
1433019	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.19		ug/L	P240871	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: One of the matrix spike recoveries is unavailable due to high analyte concentration in the QC sample.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample was reanalyzed out of holding time due to analytical difficulties.

Sample Location: 011479**Collection Date/Time: 05/31/2012 11:53 AM****Field ID: MARION SALT SPRINGS****Matrix: W-SURF-FRH**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1433012	EPA 180.1 Rev. 2.0	Turbidity	0.25		NTU	P240462	
	EPA 300.0 Rev. 2.1	Chloride	1.1E+03		mg Cl/L	P240816	
		Sulfate	290		mg SO4/L	P240817	
	SM 2120 B	Color (true)	2.5	U	PCU	P240535	
	SM 2320 B-97	Alkalinity	65		mg CaCO3/L	P240553	
	SM 2540 C-97	TDS	2.11E+03		mg/L	P240750	
1433014	EPA 350.1 Rev. 2.0	Ammonia-N	0.011	I	mg N/L	P240731	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.093	I	mg N/L	P240609	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.097		mg N/L	P240739	
	EPA 365.1 Rev. 2.0	Total-P	0.83		mg P/L	P240628	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240659	
1433016	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015	Q	mg P/L	P240910	
1433018	EPA 200.7 Rev. 4.4	Boron	191		ug/L	P240642	
		Calcium	122		mg/L	P240642	
		Magnesium	66.4		mg/L	P240642	
		Potassium	17.1		mg/L	P240642	
		Sodium	577		mg/L	P240642	

Field ID: MARION SALT SPRINGS

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1433020	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0097	U	ug/L	P240871	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: One of the matrix spike recoveries is unavailable due to high analyte concentration in the QC sample.

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample was reanalyzed out of holding time due to analytical difficulties.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)**Batch ID: P240871**

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0**Batch ID: P240462**

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4**Batch ID: P240642**

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: P240816**

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1**Batch ID: P240817**

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0**Batch ID: P240731**

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

Reference Method: EPA 351.2 Rev. 2.0**Batch ID: P240609**

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: P240739

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240628

Component	Result	Code	Units
Total-P	0.005	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240792

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240910

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

Reference Method: SM 2120 B

Batch ID: P240535

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97

Batch ID: P240552

Component	Result	Code	Units
Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2320 B-97

Batch ID: P240553

Component	Result	Code	Units
Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97

Batch ID: P240749

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97

Batch ID: P240750

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 5310 B-00

Batch ID: P240659

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P240871

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	74.0	68.4	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P240642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Boron	97.2		P	85 - 115
Calcium	101		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	104		P	85 - 115
Sodium	98.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P240816

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P240817

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P240609

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240739

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	93.0		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240628

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240792

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240910

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	106		P	90 - 110

Reference Method: SM 2320 B-97

Batch ID: P240552

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alkalinity	102		P	85 - 115

Reference Method: SM 2320 B-97

Batch ID: P240553

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

Reference Method: SM 5310 B-00

Batch ID: P240659

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	92.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P240871

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433332	Sucralose	60.4	61.2	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P240642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1431825	Boron	103	104	P/P	80 - 120
1431825	Calcium	99.6		P	80 - 120
1431825	Magnesium	99.2	97.1	P/P	80 - 120
1431825	Potassium	108	110	P/P	80 - 120
1431825	Sodium	101	102	P/P	80 - 120
1433040	Boron	102		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P240642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433040	Calcium	99.9		P	80 - 120
1433040	Magnesium	99.1		P	80 - 120
1433040	Potassium	104		P	80 - 120
1433040	Sodium	99.5		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P240816

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1432884	Chloride	100	102	P/P	90 - 110
1433031	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P240817

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1432884	Sulfate	93.8	94.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433323	Ammonia-N	96.2	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P240609

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1432933	Kjeldahl Nitrogen	96.7	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240739

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433014	NO2NO3-N	94.4	93.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240628

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433033	Total-P	109	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240792

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1432925	Total-P	102	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240910

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

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433035	O-Phosphate-P	96.8	100	P/P	90 - 110

Reference Method: SM 5310 B-00

Batch ID: P240659

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1433013	Organic Carbon	99.4	95.2	P/P	85 - 115

Quality Assurance Report

Precision

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P240871

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433332	Sucralose	1.32	Spike	P	0 - 30
LFB	Sucralose	7.87	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P240462

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432983	Turbidity	8.00	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P240642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1431825	Boron	1.16	Spike	P	0 - 20
1431825	Calcium	0.168	Sample	P	0 - 20
1431825	Magnesium	3.83	Sample	P	0 - 20
1431825	Potassium	1.26	Spike	P	0 - 20
1431825	Sodium	0.797	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P240816

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432884	Chloride	1.70	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P240817

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432884	Sulfate	0.255	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240731

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433323	Ammonia-N	5.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P240609

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432933	Kjeldahl Nitrogen	0.762	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240739

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433014	NO2NO3-N	0.702	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240628

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433033	Total-P	0.139	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240792

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432925	Total-P	1.47	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240910

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433035	O-Phosphate-P	2.58	Spike	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P240552

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432881	Alkalinity	0.466	Sample	P	0 - 20
1432883	Alkalinity	1.62	Sample	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P240553

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432921	Alkalinity	1.53	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97

Batch ID: P240553

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433048	Alkalinity	0.0702	Sample	P	0 - 20

Reference Method: SM 2540 C-97

Batch ID: P240749

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1432921	TDS	4.22	Sample	P	0 - 10

Reference Method: SM 2540 C-97

Batch ID: P240750

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433048	TDS	1.02	Sample	P	0 - 10

Reference Method: SM 5310 B-00

Batch ID: P240659

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433013	Organic Carbon	4.31	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 Surrogates

Lab Sample ID: 1433019

Field Sample ID: WEKIWA SPRINGS

Reference Method

DEP SOP: LC-001-2 (based on EPA 8321B)

Surrogate

Sucralose-d6

% Rec.

59.2

Pass/Fail

P

Control Limits

40 - 150

Lab Sample ID: 1433020

Field Sample ID: MARION SALT SPRINGS

Reference Method

DEP SOP: LC-001-2 (based on EPA 8321B)

Surrogate

Sucralose-d6

% Rec.

51.5

Pass/Fail

P

Control Limits

40 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A45398

Included Lab Sample IDs: 1433011, 1433012

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

Quality Assurance Report

Calibration Verification

Reference Method: SM 2120 B

Run ID: A45429

Included Lab Sample IDs: 1433011, 1433012

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	85 - 115

Reference Method: SM 2320 B-97

Run ID: A45442

Included Lab Sample IDs: 1433011, 1433012

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alkalinity	101	105	P/P	85 - 115
Alkalinity	105	101	P/P	85 - 115

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A45473

Included Lab Sample IDs: 1433013, 1433014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.6	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A45480

Included Lab Sample IDs: 1433014

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A45487

Included Lab Sample IDs: 1433017, 1433018

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	99.4	99.2	P/P	90 - 110
Calcium	99.6	99.3	P/P	90 - 110
Magnesium	99.4	99.3	P/P	90 - 110
Potassium	99.7	100	P/P	90 - 110
Sodium	98.1	98.3	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A45492

Included Lab Sample IDs: 1433013, 1433014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	98.5	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A45515

Included Lab Sample IDs: 1433013, 1433014

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

Quality Assurance Report

Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A45516

Included Lab Sample IDs: 1433013, 1433014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	91.6	91.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A45534

Included Lab Sample IDs: 1433013

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A45543

Included Lab Sample IDs: 1433011, 1433012

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	97.2	98.3	P/P	90 - 110

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Run ID: A45569

Included Lab Sample IDs: 1433019, 1433020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	128	120	P/P	70 - 140
Sucralose	98.4	128	P/P	70 - 140

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A45591

Included Lab Sample IDs: 1433015, 1433016

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	99.1	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			Precision SMP	MS
				LCS				
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose	74.0	68.4	60.4	61.2	7.87		1.32
EPA 180.1 Rev. 2.0	Turbidity						8.00	
EPA 200.7 Rev. 4.4	Boron	97.2		103	104	102		1.16
	Calcium	101		99.6	99.9		0.168	
	Magnesium	103		99.2	97.1	99.1	3.83	
	Potassium	104		108	110	104		1.26
	Sodium	98.9		101	102	99.5		0.797
EPA 300.0 Rev. 2.1	Chloride	99.8		100	102	99.5		1.70

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 300.0 Rev. 2.1	Sulfate	96.0	93.8	94.1			0.255
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	96.2	102			5.12
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.8	96.7	95.5			0.762
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	93.0	94.4	93.4			0.702
EPA 365.1 Rev. 2.0	Total-P	106	109	109			0.139
	Total-P	105	102	99.7			1.47
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	106	96.8	100			2.58
SM 2320 B-97	Alkalinity	102				0.466 1.62	
	Alkalinity	103				1.53	
						0.0702	
SM 2540 C-97	TDS					4.22	
	TDS					1.02	
SM 5310 B-00	Organic Carbon	92.8	99.4	95.2			4.31

Reference Method Descriptions

Method / NELAC Cert. #	Description	Associated Samples
DEP SOP: LC-001-2 (based on EPA 8321B) / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1433019, 1433020
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1433011, 1433012
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1433017, 1433018
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1433011, 1433012
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1433011, 1433012
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1433013, 1433014
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1433013, 1433014
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1433013, 1433014
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1433013, 1433014
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1433015, 1433016
SM 2120 B / E31780	True Color measured at 450 nm or Apparent Color	1433011, 1433012
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1433011, 1433012
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1433011, 1433012
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1433013, 1433014

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-2 (based on EPA 8321B)	06/01/2012	06/06/2012	Hoor Shaik	06/09/2012	S. M. Reddy	1433019, 1433020
EPA 180.1 Rev. 2.0	06/01/2012			06/01/2012 16:49	Bryan A. Werth	1433011, 1433012
EPA 200.7 Rev. 4.4	06/01/2012	06/05/2012	Elliott D. Healy	06/06/2012	Elisa J Lutz	1433017, 1433018
EPA 300.0 Rev. 2.1	06/01/2012			06/07/2012	Gary Dearman	1433011, 1433012
EPA 350.1 Rev. 2.0	06/01/2012			06/08/2012	Peter D. Kaus	1433013, 1433014
EPA 351.2 Rev. 2.0	06/01/2012	06/05/2012	Christopher Armour	06/06/2012	Bryan A. Werth	1433013, 1433014
EPA 353.2 Rev. 2.0	06/01/2012			06/08/2012	Sima Feizi	1433013, 1433014
EPA 365.1 Rev. 2.0	06/01/2012	06/05/2012	Megan E. Faircloth	06/06/2012	Pallavi R. Gadwal	1433014
	06/01/2012	06/08/2012	Christopher Armour	06/11/2012	Megan E. Faircloth	1433013
EPA 365.1 Rev. 2.0 dissolved	06/01/2012			06/13/2012 15:49	Megan E. Faircloth	1433015
	06/01/2012			06/13/2012 15:50	Megan E. Faircloth	1433016
SM 2120 B	06/01/2012			06/01/2012 16:44	Blanca Fach	1433011
	06/01/2012			06/01/2012 16:45	Blanca Fach	1433012
SM 2320 B-97	06/01/2012			06/04/2012	Dale L. Simmons	1433011, 1433012
SM 2540 C-97	06/01/2012			06/05/2012	Yijie Li	1433011, 1433012
SM 5310 B-00	06/01/2012			06/07/2012	Dale L. Simmons	1433013, 1433014