

Chemical Analysis Report

WTRSHD-MGT-2012-03-30-01

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

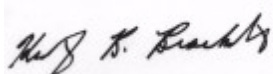
Event Description: **SPRG1201**
Request ID: **RQ-2012-03-05-13**
Customer: **WTRSHD-MGT**
Project ID: **SPG_QTR_WQ**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400
Attn: Kathryn Holland

For additional information please contact
Timothy W. Fitzpatrick
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Certified by: Kathryn Brackett, Environmental Administrator

Date Certified: 13-APR-2012 16:30



NON-CONFORMANCE REPORT INCLUDED

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-2012-03-30-32

Job: TLH-2012-03-30-33

Job: TLH-2012-03-30-34

Group: Nutrients

Group: Metals

Group: Pesticides

Sample Location: 11390**Collection Date/Time: 03/29/2012 04:31 PM****Field ID: DELEON SPRING****Matrix: W-SURF-FRH**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1418527	EPA 180.1 Rev. 2.0	Turbidity	0.65		NTU	P237960	
	EPA 300.0 Rev. 2.1	Chloride	100		mg Cl/L	P238301	
		Sulfate	21		mg SO4/L	P238302	
		Color (true)	3.1	I	PCU	P237985	
	SM 2320 B-97	Alkalinity	127	A	mg CaCO3/L	P238114	
	SM 2540 C-97	TDS	333		mg/L	P238241	
1418529	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P238086	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21		mg N/L	P238090	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.54		mg N/L	P238054	
	EPA 365.1 Rev. 2.0	Total-P	0.063		mg P/L	P238248	
	SM 5310 B-00	Organic Carbon	1.3	I	mg C/L	P238065	
1418531	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.059		mg P/L	P237996	MS
1418533	EPA 200.7 Rev. 4.4	Boron	41	I	ug/L	P238177	
		Calcium	51.2	A	mg/L	P238177	
		Magnesium	10.8	A	mg/L	P238177	
		Potassium	3.6	A	mg/L	P238177	
		Sodium	54.6	A	mg/L	P238177	
1418535	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.028	I	ug/L	P238401	

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.

DEP SOP: LC-001-2 (based on EPA 8321B): Sucralose result confirmed in re-extraction.

Sample Location: 9673**Collection Date/Time: 03/29/2012 02:03 PM****Field ID: BLUE SPRING VOLUSIA****Matrix: W-SURF-FRH**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1418526	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P237960	
	EPA 300.0 Rev. 2.1	Chloride	520		mg Cl/L	P238301	
		Sulfate	77		mg SO4/L	P238302	
		Color (true)	3.7	I	PCU	P237985	
	SM 2320 B-97	Alkalinity	154		mg CaCO3/L	P238114	
	SM 2540 C-97	TDS	1.08E+03		mg/L	P238241	
1418528	EPA 350.1 Rev. 2.0	Ammonia-N	0.082		mg N/L	P238086	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P238090	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.39		mg N/L	P238054	
	EPA 365.1 Rev. 2.0	Total-P	0.073		mg P/L	P238248	
	SM 5310 B-00	Organic Carbon	1.8	I	mg C/L	P238065	
1418530	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.10		mg P/L	P237996	MS
1418532	EPA 200.7 Rev. 4.4	Boron	119		ug/L	P238177	
		Calcium	77.4		mg/L	P238177	
		Magnesium	35.6		mg/L	P238177	
		Potassium	10.3		mg/L	P238177	
		Sodium	291		mg/L	P238177	

Field ID: BLUE SPRING VOLUSIA

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1418534	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.10		ug/L	P238401	

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.

EPA 365.1 Rev. 2.0: Total-P: The result was confirmed on 04/10/2012.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample was reanalyzed 4/10/12. The result was 0.078 Q mg P/L .

Non-Conformance Report

NCR ID: 4086

Event(s)Job(s)Sample(s)Test(s)

WTRSHD-MGT-2012-03-30-01

NCR Type: SHIPPING/RECEIVING

NCR Category: Receiving

Observation: 1) Field sheet lists two different RQs (RQ-2012-02-27-26 and RQ-2012-03-05-13). The sample containers for W-SUC-AA-R analysis have labels for RQ-2012-02-27-26 and the the rest of the samples are labeled for RQ-2012-03-05-13. All containers were collected at the same two sites.

2) Field sheet indicates samples were shipped through fed ex. They were received at the lab through hand delivery by the samplers.

Resolution: 1) Review of the the two RQs shows that they have identical sampling events and analyses. The only difference was that they were scheduled a week apart. All samples were logged in under RQ-2012-03-05-13.

2) Samples were logged in as being hand delivered.

Authorised by/Date: Kathryn Brackett 3/30/2012

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry Tim Fitzpatrick (850) 245-8085
Biology David D. Whiting (850) 245-8177

Quality Assurance Report

Method Blank Results

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

Batch ID: P238401

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P237960

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P238177

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238301

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238302

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P238086

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P238090

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P238054

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: P238248

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237996

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

Reference Method: SM 2120 B

Batch ID: P237985

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97

Batch ID: P238114

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-97

Batch ID: P238241

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 5310 B-00

Batch ID: P238065

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: P238401

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	53.9	63.1	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P238177

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Boron	98.6		P	85 - 115
Calcium	101		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	100		P	85 - 115
Sodium	99.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238301

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238302

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P238086

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P238090

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	91.5		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P238054

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P238248

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237996

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

Reference Method: SM 2320 B-97

Batch ID: P238114

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alkalinity	98.8		P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P238065

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

Quality Assurance Report Matrix Spike Accuracy

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

Batch ID: P238401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418535	Sucralose	52.2	47.8	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P238177

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418533	Boron	101	102	P/P	80 - 120
1418533	Calcium	101		P	80 - 120
1418533	Magnesium	102		P	80 - 120
1418533	Potassium	102	104	P/P	80 - 120
1418533	Sodium	100		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418385	Chloride	100		P	90 - 110
1418434	Chloride	98.3	95.3	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238302

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418385	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P238086

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418514	Ammonia-N	101	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P238090

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418502	Kjeldahl Nitrogen	99.6	91.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P238054

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418514	NO2NO3-N	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P238248

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418528	Total-P	109	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418493	O-Phosphate-P	89.9	96.1	F/P	90 - 110

Reference Method: SM 5310 B-00

Batch ID: P238065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1418203	Organic Carbon	100	100	P/P	85 - 115

Quality Assurance Report Precision

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

Batch ID: P238401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418535	Sucralose	5.56	Spike	P	0 - 40
LFB	Sucralose	15.7	LCS	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P237960

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418485	Turbidity	3.56	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P238177

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418533	Boron	1.17	Spike	P	0 - 20
1418533	Calcium	1.22	Sample	P	0 - 20
1418533	Magnesium	2.13	Sample	P	0 - 20
1418533	Potassium	1.70	Sample	P	0 - 20
1418533	Sodium	1.60	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238301

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418434	Chloride	1.82	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P238302

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418434	Sulfate	2.24	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P238086

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418514	Ammonia-N	1.93	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P238090

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418502	Kjeldahl Nitrogen	7.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P238054

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418514	NO2NO3-N	1.14	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P238248

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418528	Total-P	0.825	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P237996

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418493	O-Phosphate-P	6.07	Spike	P	0 - 20

Reference Method: SM 2120 B

Batch ID: P237985

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418485	Color (true)	2.02	Sample	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P238114

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418435	Alkalinity	0.185	Sample	P	0 - 20
1418527	Alkalinity	0.797	Sample	P	0 - 20

Reference Method: SM 2540 C-97

Batch ID: P238241

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418864	TDS	0.269	Sample	P	0 - 10

Reference Method: SM 5310 B-00

Batch ID: P238065

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1418203	Organic Carbon	0.0560	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: 1418534

Field Sample ID: BLUE SPRING VOLUSIA

Reference Method

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

Surrogate

Sucralose-d6

% Rec.

54.1

Pass/Fail

P

Control Limits

40 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1418535

Field Sample ID: DELEON SPRING

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	48.2	P	40 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A44350

Included Lab Sample IDs: 1418526, 1418527

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

Reference Method: SM 2120 B

Run ID: A44361

Included Lab Sample IDs: 1418526, 1418527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	99.8	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A44367

Included Lab Sample IDs: 1418530, 1418531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.7	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A44389

Included Lab Sample IDs: 1418528, 1418529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.4	98.0	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A44392

Included Lab Sample IDs: 1418528, 1418529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.2	102	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A44404

Included Lab Sample IDs: 1418528, 1418529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	105	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A44406

Included Lab Sample IDs: 1418528, 1418529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	94.0	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A44415

Included Lab Sample IDs: 1418526, 1418527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alkalinity	96.7	99.7	P/P	85 - 115
Alkalinity	100	96.7	P/P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A44437

Included Lab Sample IDs: 1418532, 1418533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	98.4	98.3	P/P	90 - 110
Calcium	103	99.1	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Potassium	101	99.2	P/P	90 - 110
Sodium	102	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A44465

Included Lab Sample IDs: 1418528, 1418529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	104	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A44488

Included Lab Sample IDs: 1418526, 1418527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	101	P/P	90 - 110
Sulfate	94.6	100	P/P	90 - 110

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

Run ID: A44521

Included Lab Sample IDs: 1418534, 1418535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	93.0	97.8	P/P	70 - 140

* 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
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose	53.9	63.1	52.2	47.8	15.7		5.56
EPA 180.1 Rev. 2.0	Turbidity						3.56	
EPA 200.7 Rev. 4.4	Boron	98.6		101	102			1.17
	Calcium	101		101			1.22	
	Magnesium	102		102			2.13	
	Potassium	100		102	104		1.70	
	Sodium	99.9		100			1.60	
EPA 300.0 Rev. 2.1	Chloride	98.1		98.3	95.3	100		1.82
	Sulfate	95.1		100				2.24
EPA 350.1 Rev. 2.0	Ammonia-N	99.0		101	98.5			1.93
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	91.5		99.6	91.1			7.96
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101		103	101			1.14
EPA 365.1 Rev. 2.0	Total-P	102		109	108			0.825
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		89.9	96.1			6.07
SM 2120 B	Color (true)						2.02	
SM 2320 B-97	Alkalinity	98.8					0.185	
							0.797	
SM 2540 C-97	TDS						0.269	
SM 5310 B-00	Organic Carbon	99.6		100	100			0.0560

Reference Method Descriptions

Method / NELAC Cert. #	Description
DEP SOP: LC-001-2 (based on EPA 8321B) / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
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
DEP SOP: LC-001-2 (based on EPA 8321B)	03/30/2012	04/03/2012	Hoor Shaik	04/04/2012	S. M. Reddy	1418534, 1418535
EPA 180.1 Rev. 2.0	03/30/2012			03/30/2012 15:15	Bryan A. Werth	1418526, 1418527
EPA 200.7 Rev. 4.4	03/30/2012	04/02/2012	Elliott D. Healy	04/05/2012	Joshua Ayres	1418532, 1418533
EPA 300.0 Rev. 2.1	03/30/2012			04/05/2012	Gary Dearman	1418526, 1418527
EPA 350.1 Rev. 2.0	03/30/2012			04/04/2012	Peter D. Kaus	1418528, 1418529
EPA 351.2 Rev. 2.0	03/30/2012	04/03/2012	Christopher Armour	04/04/2012	Bryan A. Werth	1418528, 1418529
EPA 353.2 Rev. 2.0	03/30/2012			04/03/2012	Sima Feizi	1418528, 1418529
EPA 365.1 Rev. 2.0	03/30/2012	04/05/2012	Pallavi R. Gadwal	04/06/2012	Christopher Armour	1418528, 1418529
EPA 365.1 Rev. 2.0 dissolved	03/30/2012			03/30/2012 15:33	Pallavi R. Gadwal	1418530
	03/30/2012			03/30/2012 15:34	Pallavi R. Gadwal	1418531
SM 2120 B	03/30/2012			03/30/2012 14:47	Blanca Fach	1418526
	03/30/2012			03/30/2012 14:48	Blanca Fach	1418527
SM 2320 B-97	03/30/2012			04/04/2012	Dale L. Simmons	1418526, 1418527
SM 2540 C-97	03/30/2012			04/04/2012	Sima Feizi	1418526, 1418527
SM 5310 B-00	03/30/2012			04/03/2012	Dale L. Simmons	1418528, 1418529