

Chemical Analysis Report

WTRSHD-MGT-2012-09-20-01

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

Event Description: **Alachua County - Santa Fe GW Sampling**
Request ID: **RQ-2012-09-17-36**
Customer: **WTRSHD-MGT**
Project ID: **TMDL**

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Date Certified: 03-OCT-2012 15:47



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.

Sample Location: AAC 1215

Collection Date/Time: 09/19/2012 02:28 PM

Field ID: AAC 1215

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455510	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.011	U	ug/L	P244494	

Sample Location: AAC 1215 DUP

Collection Date/Time: 09/19/2012 02:32 PM

Field ID: AAC 1215 DUP

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455511	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.011	U	ug/L	P244494	

Sample Location: AAF 3150

Collection Date/Time: 09/19/2012 03:00 PM

Field ID: AAF 3150

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455515	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.011	U	ug/L	P244494	

Sample Location: AAK 7008

Collection Date/Time: 09/19/2012 12:05 PM

Field ID: AAK 7008

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455509	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.13		ug/L	P244494	

Sample Location: AAK 7018

Collection Date/Time: 09/19/2012 03:38 PM

Field ID: AAK 7018

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455513	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.010	U	ug/L	P244494	

Sample Location: HORNSBY

Collection Date/Time: 09/19/2012 12:30 PM

Field ID: HORNSBY

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455516	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0099	U	ug/L	P244494	

Sample Location: POE

Collection Date/Time: 09/19/2012 03:00 PM

Field ID: POE

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455512	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.17		ug/L	P244494	

Sample Location: SULEK

Collection Date/Time: 09/19/2012 03:30 PM

Field ID: SULEK

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1455514	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.013	U	ug/L	P244494	

Quality Assurance Report Method Blank Results

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

Batch ID: P244494

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

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

Batch ID: P244494

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	68.4	67.6	P/P	40 - 130

Quality Assurance Report Matrix Spike Accuracy

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

Batch ID: P244494

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1455233	Sucralose	51.6	49.6	P/P	40 - 130

Quality Assurance Report Precision

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

Batch ID: P244494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1455233	Sucralose	3.95	Spike	P	0 - 30
LFB	Sucralose	1.18	LCS	P	0 - 30

* 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: 1455509

Field Sample ID: AAK 7008

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	55.4	P	40 - 150

Lab Sample ID: 1455510

Field Sample ID: AAC 1215

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	83.2	P	40 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1455511

Field Sample ID: AAC 1215 DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	80.6	P	40 - 150

Lab Sample ID: 1455512

Field Sample ID: POE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	73.6	P	40 - 150

Lab Sample ID: 1455513

Field Sample ID: AAK 7018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	75.7	P	40 - 150

Lab Sample ID: 1455514

Field Sample ID: SULEK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	74.9	P	40 - 150

Lab Sample ID: 1455515

Field Sample ID: AAF 3150

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	67.3	P	40 - 150

Lab Sample ID: 1455516

Field Sample ID: HORNSBY

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	79.7	P	40 - 150

Quality Assurance Report Calibration Verification

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

Run ID: A47097

Included Lab Sample IDs: 1455509, 1455510, 1455511, 1455512, 1455513, 1455514, 1455515, 1455516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	112	118	P/P	70 - 140
Sucralose	118	112	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		Precision	
						LCS	MS
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose	68.4	67.6	51.6	49.6	1.18	3.95

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	1455509, 1455510, 1455511, 1455512, 1455513, 1455514, 1455515, 1455516

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)	09/20/2012	09/21/2012	Fe-Val Siddell	09/22/2012	S. M. Reddy	1455509, 1455510, 1455511, 1455512, 1455513, 1455514, 1455515, 1455516