

Chemical Analysis Report

WTRSHD-MGT-2012-02-09-01

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

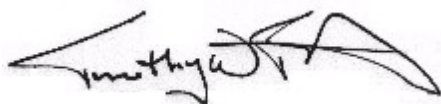
Event Description: **SPRG1201**
Request ID: **RQ-2012-02-06-41**
Customer: **WTRSHD-MGT**
Project ID: **SPG_QTR_WQ**

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Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 24-FEB-2012 16:01

A handwritten signature in black ink, appearing to read "Timothy Fitzpatrick", with a stylized flourish at the end.

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-2012-02-09-48

Job: TLH-2012-02-09-49

Job: TLH-2012-02-09-50

Group: Nutrients

Group: Metals

Group: Pesticides

Sample Location: 011395**Collection Date/Time: 02/08/2012 02:10 PM****Field ID: ROCK SPRINGS****Matrix: W-OTHER**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1407610	EPA 180.1 Rev. 2.0	Turbidity	0.40		NTU	P235861	
	EPA 300.0 Rev. 2.1	Chloride	9.8		mg Cl/L	P236195	
		Sulfate	19		mg SO4/L	P236204	
	SM 2120 B	Color (true)	2.5	U	PCU	P235853	
	SM 2320 B-97	Alkalinity	100		mg CaCO3/L	P235953	
	SM 2540 C-97	TDS	163		mg/L	P236162	
1407612	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P235884	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.91		mg N/L	P236046	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.3		mg N/L	P236071	
	EPA 365.1 Rev. 2.0	Total-P	0.082		mg P/L	P236000	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P236078	
1407614	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.080		mg P/L	P235868	
1407616	EPA 200.7 Rev. 4.4	Boron	21	I	ug/L	P236266	
		Calcium	33.1		mg/L	P236266	
		Magnesium	10.1		mg/L	P236266	
		Potassium	1.4		mg/L	P236266	
		Sodium	5.9		mg/L	P236266	
1407618	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.033	I	ug/L	P236274	

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.

DEP SOP: LC-001-2 (based on EPA 8321B): Matrix spike accuracy for sucralose could not be assessed due to high concentration of parameter in the spiked sample. Sucralose result confirmed in re-extraction.

Sample Location: 011403**Collection Date/Time: 02/08/2012 12:29 PM****Field ID: WEKIWA SPRING****Matrix: W-OTHER**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1407609	EPA 180.1 Rev. 2.0	Turbidity	0.50		NTU	P235861	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P236195	
		Sulfate	21		mg SO4/L	P236204	
	SM 2120 B	Color (true)	2.5	U	PCU	P235853	
	SM 2320 B-97	Alkalinity	134	A	mg CaCO3/L	P235953	
	SM 2540 C-97	TDS	201		mg/L	P236162	
1407611	EPA 350.1 Rev. 2.0	Ammonia-N	0.013	I	mg N/L	P235883	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.11	I	mg N/L	P236046	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.86		mg N/L	P236071	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P236000	
	SM 5310 B-00	Organic Carbon	1.1	I	mg C/L	P236078	
1407613	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P235868	
1407615	EPA 200.7 Rev. 4.4	Boron	34	I	ug/L	P236266	
		Calcium	43.0		mg/L	P236266	
		Magnesium	12.3		mg/L	P236266	
		Potassium	1.7		mg/L	P236266	
		Sodium	10.7		mg/L	P236266	

Field ID: WEKIWA SPRING

Matrix: W-OTHER

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1407617	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.22		ug/L	P236274	

Ref. Method and Comment:

DEP SOP: LC-001-2 (based on EPA 8321B): Matrix spike accuracy for sucralose could not be assessed due to high concentration of parameter in the sample.

Quality Assurance Report Method Blank Results

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

Batch ID: P236274

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P235861

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P236266

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: P236195

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236204

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235883

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235884

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P236046

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P236071

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P236000

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P235868

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

Reference Method: SM 2120 B

Batch ID: P235853

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97

Batch ID: P235953

Component	Result	Code	Units
Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97

Batch ID: P236162

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 5310 B-00

Batch ID: P236078

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: P236274

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

Laboratory Control Sample Accuracy

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

Batch ID: P236274

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	91.7	84.0	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P236266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Boron	98.5		P	85 - 115
Calcium	102		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	102		P	85 - 115
Sodium	105		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236204

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	92.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235883

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235884

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P236046

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P236071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P236000

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

Batch ID: P236000

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P235868

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

Reference Method: SM 2320 B-97

Batch ID: P235953

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alkalinity	98.2		P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P236078

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P236266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407616	Boron	103		P	80 - 120
1407616	Calcium	100		P	80 - 120
1407616	Magnesium	99.0		P	80 - 120
1407616	Potassium	102		P	80 - 120
1407616	Sodium	100		P	80 - 120
1407869	Boron	103	101	P/P	80 - 120
1407869	Calcium	102	100	P/P	80 - 120
1407869	Magnesium	103	101	P/P	80 - 120
1407869	Potassium	106	104	P/P	80 - 120
1407869	Sodium	100	98.3	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407466	Chloride	101	102	P/P	90 - 110
1407560	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236204

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407466	Sulfate	94.9	96.1	P/P	90 - 110
1407560	Sulfate	95.0		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407562	Ammonia-N	101	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P236046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407631	Kjeldahl Nitrogen	102	96.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P236071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407630	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P236000

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407630	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P235868

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407521	O-Phosphate-P	96.3	100	P/P	90 - 110

Reference Method: SM 5310 B-00

Batch ID: P236078

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1407563	Organic Carbon	97.6	95.1	P/P	85 - 115

Quality Assurance Report Precision

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

Batch ID: P236274

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407617	Sucralose	24.9	Spike	P	0 - 40
LFB	Sucralose	8.76	LCS	P	0 - 40

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P235861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407561	Turbidity	3.60	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P236266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407869	Boron	1.78	Spike	P	0 - 20
1407869	Calcium	1.36	Spike	P	0 - 20
1407869	Magnesium	2.28	Spike	P	0 - 20
1407869	Potassium	1.69	Spike	P	0 - 20
1407869	Sodium	1.28	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407466	Chloride	1.57	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P236204

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407466	Sulfate	1.20	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407562	Ammonia-N	2.19	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P235884

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407630	Ammonia-N	0.828	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P236046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407631	Kjeldahl Nitrogen	3.31	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P236071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407630	NO2NO3-N	0.381	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P236000

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407630	Total-P	0.805	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P235868

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407521	O-Phosphate-P	2.93	Spike	P	0 - 20

Reference Method: SM 2120 B

Batch ID: P235853

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407588	Color (true)	13.4	Sample	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P235953

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407609	Alkalinity	0.116	Sample	P	0 - 20
1407671	Alkalinity	0.487	Sample	P	0 - 20

Reference Method: SM 2540 C-97

Batch ID: P236162

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407452	TDS	3.60	Sample	P	0 - 10

Reference Method: SM 5310 B-00

Batch ID: P236078

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1407563	Organic Carbon	1.96	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: 1407617

Field Sample ID: WEKIWA SPRING

Reference Method

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

Surrogate

Sucralose-d6

% Rec.

77.7

Pass/Fail

P

Control Limits

40 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1407618

Field Sample ID: ROCK SPRINGS

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	56.2	P	40 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A43459

Included Lab Sample IDs: 1407609, 1407610

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A43462

Included Lab Sample IDs: 1407609, 1407610

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A43466

Included Lab Sample IDs: 1407613, 1407614

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	91.8	95.1	P/P	90 - 110
O-Phosphate-P	96.0	91.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A43473

Included Lab Sample IDs: 1407611, 1407612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	104	102	P/P	90 - 110
Ammonia-N	98.4	104	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A43505

Included Lab Sample IDs: 1407609, 1407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alkalinity	100	97.7	P/P	85 - 115
Alkalinity	97.7	99.1	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A43527

Included Lab Sample IDs: 1407611, 1407612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.9	98.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A43551

Included Lab Sample IDs: 1407611, 1407612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A43560

Included Lab Sample IDs: 1407611, 1407612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A43563

Included Lab Sample IDs: 1407611, 1407612

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.8	100	P/P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A43610

Included Lab Sample IDs: 1407609, 1407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	100	P/P	90 - 110
Sulfate	95.4	94.7	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A43631

Included Lab Sample IDs: 1407615, 1407616

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	98.7	99.7	P/P	90 - 110
Boron	99.7	99.0	P/P	90 - 110
Calcium	101	101	P/P	90 - 110
Calcium	101	98.7	P/P	90 - 110
Magnesium	99.0	99.7	P/P	90 - 110
Magnesium	99.7	99.0	P/P	90 - 110
Potassium	101	101	P/P	90 - 110
Potassium	101	101	P/P	90 - 110
Sodium	99.0	96.0	P/P	90 - 110
Sodium	99.4	99.0	P/P	90 - 110

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

Run ID: A43640

Included Lab Sample IDs: 1407617, 1407618

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	104	82.4	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	SMP	MS
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose	91.7	84.0				8.76		24.9
EPA 180.1 Rev. 2.0	Turbidity							3.60	
EPA 200.7 Rev. 4.4	Boron	98.5		103	103	101			1.78
	Calcium	102		100	102	100			1.36
	Magnesium	103		99.0	103	101			2.28
	Potassium	102		102	106	104			1.69
	Sodium	105		100	100	98.3			1.28
EPA 300.0 Rev. 2.1	Chloride	99.6		101	102	100			1.57
	Sulfate	92.3		94.9	96.1	95.0			1.20
EPA 350.1 Rev. 2.0	Ammonia-N	100		101	104				2.19
	Ammonia-N	102							0.828
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		102	96.2				3.31
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0		101	100				0.381
EPA 365.1 Rev. 2.0	Total-P	103		103	102				0.805
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.5		96.3	100				2.93
SM 2120 B	Color (true)							13.4	
SM 2320 B-97	Alkalinity	98.2						0.487	
								0.116	
SM 2540 C-97	TDS							3.60	
SM 5310 B-00	Organic Carbon	100		97.6	95.1				1.96

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)	02/09/2012	02/13/2012	Hoor Shaik	02/14/2012	S. M. Reddy	1407617, 1407618
EPA 180.1 Rev. 2.0	02/09/2012			02/09/2012 16:10	Bryan A. Werth	1407609, 1407610
EPA 200.7 Rev. 4.4	02/09/2012	02/17/2012	Elliott D. Healy	02/20/2012	Elisa J Lutz	1407615, 1407616
EPA 300.0 Rev. 2.1	02/09/2012			02/15/2012	Ping Hua	1407609, 1407610
EPA 350.1 Rev. 2.0	02/09/2012			02/10/2012	Diana M. Dunbar	1407611, 1407612
EPA 351.2 Rev. 2.0	02/09/2012	02/14/2012	Christopher Armour	02/15/2012	Bryan A. Werth	1407611, 1407612
EPA 353.2 Rev. 2.0	02/09/2012			02/14/2012	Sima Feizi	1407611, 1407612
EPA 365.1 Rev. 2.0	02/09/2012	02/13/2012	Megan E. Faircloth	02/14/2012	Megan E. Faircloth	1407611, 1407612
EPA 365.1 Rev. 2.0 dissolved	02/09/2012			02/09/2012 15:06	Pallavi R. Gadwal	1407614
	02/09/2012			02/09/2012 15:16	Pallavi R. Gadwal	1407613
SM 2120 B	02/09/2012			02/09/2012 13:50	Rochelle Y Jackson	1407609, 1407610
SM 2320 B-97	02/09/2012			02/13/2012	Dale L. Simmons	1407609, 1407610
SM 2540 C-97	02/09/2012			02/13/2012	Yijie Li	1407609, 1407610
SM 5310 B-00	02/09/2012			02/15/2012	Rochelle Y Jackson	1407611, 1407612