

Chemical Analysis Report

WTRSHD-MGT-2012-06-08-01

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

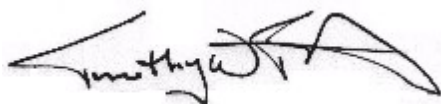
Event Description: **TMDL Spg Sampling - Santa Fe & Suwannee Basins**
Request ID: **RQ-2012-06-11-38**
Customer: **WTRSHD-MGT**
Project ID: **TMDL**

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

For additional information please contact
Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Colin Wright, Ph.D.
Kathryn Brackett
Thekkekalathil Chandrasekhar, PhD, QA Officer
Phone (850) 245-8085

Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 29-JUN-2012 15:26



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.

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-2012-06-08-61

Group: Nutrients

Job: TLH-2012-06-08-62

Group: Metals

Job: TLH-2012-06-08-63

Group: Pesticides

Sample Location: BLUE HOLE**Collection Date/Time: 06/08/2012 08:40 AM****Field ID: BLUE HOLE**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434461	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	5.3		mg Cl/L	P241152	
		Sulfate	6.2		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	148	A	mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	174		mg/L	P241087	
1434471	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.66		mg N/L	P240986	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434481	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.048		mg P/L	P240744	
1434491	EPA 200.7 Rev. 4.4	Boron	16	I	ug/L	P241083	
		Calcium	54.4		mg/L	P241083	
		Magnesium	5.73		mg/L	P241083	
		Potassium	0.36	I	mg/L	P241083	
		Sodium	3.2		mg/L	P241083	
1434501	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0098	U	ug/L	P240965	

Ref. Method and Comment:

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

Sample Location: DEVIL'S EYE**Collection Date/Time: 06/07/2012 12:23 PM****Field ID: DEVIL'S EYE**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434456	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	7.5		mg Cl/L	P241152	
		Sulfate	14		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	175		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	201		mg/L	P241087	
1434466	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	I	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.6		mg N/L	P240985	
	EPA 365.1 Rev. 2.0	Total-P	0.041		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434476	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P240744	
1434486	EPA 200.7 Rev. 4.4	Boron	19	I	ug/L	P241083	
		Calcium	68.7		mg/L	P241083	
		Magnesium	7.13		mg/L	P241083	
		Potassium	0.50	I	mg/L	P241083	
		Sodium	4.0		mg/L	P241083	
1434496	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.013	I	ug/L	P240873	

Field ID: DEVIL'S EYE

Matrix: W-SURF-FRH

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

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

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

Sample Location: GILCHRIST BLUE**Collection Date/Time: 06/07/2012 01:40 PM****Field ID: GILCHRIST BLUE**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434457	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P241152	
		Sulfate	13		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	173		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	204		mg/L	P241087	
1434467	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.0		mg N/L	P240985	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434477	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.034		mg P/L	P240744	
1434487	EPA 200.7 Rev. 4.4	Boron	18	I	ug/L	P241083	
		Calcium	66.9		mg/L	P241083	
		Magnesium	7.19		mg/L	P241083	
		Potassium	0.48	I	mg/L	P241083	
		Sodium	3.4		mg/L	P241083	
1434497	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.021	U	ug/L	P240873	

Ref. Method and Comment:

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

DEP SOP: LC-001-2 (based on EPA 8321B): MDL elevated due to matrix interference.

Sample Location: GINNIE SPRINGS**Collection Date/Time: 06/07/2012 11:31 AM****Field ID: GINNIE SPRINGS**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434455	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P241152	
		Sulfate	12		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	164		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	180		mg/L	P241087	
1434465	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.13	I	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.6		mg N/L	P240985	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P240899	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434475	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P240744	

Field ID: GINNIE SPRINGS

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434485	EPA 200.7 Rev. 4.4	Boron	17	I	ug/L	P241083	
		Calcium	63.0		mg/L	P241083	
		Magnesium	6.68		mg/L	P241083	
		Potassium	0.43	I	mg/L	P241083	
		Sodium	3.4		mg/L	P241083	
1434495	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0098	U	ug/L	P240873	

Ref. Method and Comment:

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

Sample Location: ICHETUCKNEE HEAD**Collection Date/Time: 06/08/2012 08:20 AM****Field ID: ICHETUCKNEE HEAD**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434460	EPA 180.1 Rev. 2.0	Turbidity	0.40		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	4.4		mg Cl/L	P241152	
		Sulfate	8.5		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	153		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	172		mg/L	P241087	
1434470	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.87		mg N/L	P240986	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434480	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.025		mg P/L	P240744	
1434490	EPA 200.7 Rev. 4.4	Boron	15	I	ug/L	P241083	
		Calcium	58.0		mg/L	P241083	
		Magnesium	6.18		mg/L	P241083	
		Potassium	0.30	U	mg/L	P241083	
		Sodium	2.5		mg/L	P241083	
1434500	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0098	U	ug/L	P240965	

Ref. Method and Comment:

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

Sample Location: LAFAYETTE BLUE**Collection Date/Time: 06/08/2012 01:40 PM****Field ID: LAFAYETTE BLUE**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434464	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P241152	
		Sulfate	18		mg SO4/L	P241153	
	SM 2120 B	Color (true)	4.6	I	PCU	P240820	
	SM 2320 B-97	Alkalinity	217		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	254	A	mg/L	P241088	
1434474	EPA 350.1 Rev. 2.0	Ammonia-N	0.018	I	mg N/L	P240927	

Field ID: LAFAYETTE BLUE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434474	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21	J	mg N/L	P241117	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.1		mg N/L	P240986	
	EPA 365.1 Rev. 2.0	Total-P	0.044		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.5	I	mg C/L	P240947	
1434484	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P240744	
1434494	EPA 200.7 Rev. 4.4	Boron	22	I	ug/L	P241083	
		Calcium	74.3	A	mg/L	P241083	
		Magnesium	14.1	A	mg/L	P241083	
		Potassium	1.5	A	mg/L	P241083	
		Sodium	7.1	A	mg/L	P241083	
1434504	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0099	U	ug/L	P240965	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Quality control failure(s) observed.

Sample Location: LITTLE RIVER SPRING**Collection Date/Time: 06/07/2012 05:09 PM****Field ID: LITTLE RIVER SPRING**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434459	EPA 180.1 Rev. 2.0	Turbidity	1.7	A	NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	5.8		mg Cl/L	P241152	
		Sulfate	25		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	168		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	200		mg/L	P241087	
1434469	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	I	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	I	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P240986	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434479	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.021		mg P/L	P240744	
1434489	EPA 200.7 Rev. 4.4	Boron	18	I	ug/L	P241083	
		Calcium	64.9		mg/L	P241083	
		Magnesium	8.93		mg/L	P241083	
		Potassium	0.79	I	mg/L	P241083	
		Sodium	2.8		mg/L	P241083	
1434499	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.010	U	ug/L	P240965	

Ref. Method and Comment:

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

Sample Location: POE SPRING**Collection Date/Time: 06/07/2012 02:40 PM****Field ID: POE SPRING**

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434458	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P240726	

Field ID: POE SPRING

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434458	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P241152	
		Sulfate	35		mg SO4/L	P241153	
	SM 2120 B	Color (true)	6.3		PCU	P240820	
	SM 2320 B-97	Alkalinity	155		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	215		mg/L	P241087	
1434468	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P240985	
	EPA 365.1 Rev. 2.0	Total-P	0.054		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.8	I	mg C/L	P240947	
1434478	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.041		mg P/L	P240744	
1434488	EPA 200.7 Rev. 4.4	Boron	27	I	ug/L	P241083	
		Calcium	65.2		mg/L	P241083	
		Magnesium	8.02		mg/L	P241083	
		Potassium	0.94	I	mg/L	P241083	
		Sodium	9.2		mg/L	P241083	
1434498	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.25		ug/L	P240873	

Ref. Method and Comment:

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

Sample Location: SUW725971

Collection Date/Time: 06/08/2012 10:19 AM

Field ID: SUW725971

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434462	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P241152	
		Sulfate	41		mg SO4/L	P241153	
	SM 2120 B	Color (true)	2.5	U	PCU	P240820	
	SM 2320 B-97	Alkalinity	123		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	296		mg/L	P241087	
1434472	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	UY	mg N/L	P240927	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen		O	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N		O	mg N/L	P240986	
	EPA 365.1 Rev. 2.0	Total-P	0.020	Y	mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	UY	mg C/L	P240947	
1434482	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.021		mg P/L	P240744	
1434492	EPA 200.7 Rev. 4.4	Boron	49	I	ug/L	P241083	
		Calcium	70.5		mg/L	P241083	
		Magnesium	18.1		mg/L	P241083	
		Potassium	7.3		mg/L	P241083	
		Sodium	6.5		mg/L	P241083	

Field ID: SUW725971

Matrix: W-SURF-FRH

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

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

EPA 350.1 Rev. 2.0: Sample appears to have been preserved with sulfuric and nitric acid.

EPA 351.2 Rev. 2.0: Sample appears to have been preserved with nitric acid and sulfuric acid.

EPA 353.2 Rev. 2.0: Sample appears to have been preserved with nitric acid and sulfuric acid.

EPA 365.1 Rev. 2.0: Total-P: Sample appears to have been preserved with sulfuric and nitric acid.

SM 5310 B-00: Sample appears to have been preserved with nitric and sulfuric acid.

Sample Location: TROY SPRING

Collection Date/Time: 06/08/2012 11:30 AM

Field ID: TROY SPRING

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1434463	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P240726	
	EPA 300.0 Rev. 2.1	Chloride	6.0		mg Cl/L	P241152	
		Sulfate	13		mg SO4/L	P241153	
	SM 2120 B	Color (true)	5.9	I	PCU	P240820	
	SM 2320 B-97	Alkalinity	168		mg CaCO3/L	P240804	
	SM 2540 C-97	TDS	203		mg/L	P241087	
1434473	EPA 350.1 Rev. 2.0	Ammonia-N	0.010	U	mg N/L	P240927	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P240999	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.6		mg N/L	P240986	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P240900	
	SM 5310 B-00	Organic Carbon	1.0	U	mg C/L	P240947	
1434483	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.032		mg P/L	P240744	
1434493	EPA 200.7 Rev. 4.4	Boron	18	I	ug/L	P241083	
		Calcium	63.4		mg/L	P241083	
		Magnesium	7.90		mg/L	P241083	
		Potassium	1.2		mg/L	P241083	
		Sodium	3.2		mg/L	P241083	
1434503	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.0096	U	ug/L	P240965	

Ref. Method and Comment:

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

Non-Conformance Report

NCR ID: 4182

Event(s)

WTRSHD-MGT-2012-06-08-01

Job(s)

TLH-2012-06-08-61

Sample(s)

1434472

Test(s)NCR Type: **SAMPLING**NCR Category: **General**

Observation: Sample appears to be preserved with nitric and sulfuric acid. Sample has nitrite/nitrate concentration of over 400 mg N/L and there was less than 21 mg N/L in the unpreserved aliquot (1434462).

Resolution: The W-NO2NO3 and W-TKN tests were reported as the non numeric qualifier O. The other tests results were qualified with a Y qualifier for incorrect preservation. Customer was notified, Gary Maddox and Tom Greenhalgh.

Authorised by/Date: Bettina S. Steinbock 6/28/2012

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: P240873

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

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

Batch ID: P240965

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P240726

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P241083

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: P241152

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241153

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240850

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240927

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: P240999

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P241117

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240985

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240986

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: P240899

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240900

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240744

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

Reference Method: SM 2120 B

Batch ID: P240820

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97

Batch ID: P240804

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: P241087

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97

Batch ID: P241088

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 5310 B-00

Batch ID: P240947

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: P240873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	58.8	62.4	P/P	40 - 130

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

Batch ID: P240965

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	63.2	58.0	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P241083

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Boron	99.6		P	85 - 115
Calcium	103		P	85 - 115
Magnesium	101		P	85 - 115
Potassium	104		P	85 - 115
Sodium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241152

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241153

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.5		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240850

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240927

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P240999

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P241117

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240986

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240899

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240900

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: P240744

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97

Batch ID: P240804

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

Reference Method: SM 5310 B-00

Batch ID: P240947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

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

Batch ID: P240873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434123	Sucralose	67.2	75.6	P/P	40 - 130

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

Batch ID: P240965

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434701	Sucralose	54.1	46.2	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P241083

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434487	Boron	103		P	80 - 120
1434487	Calcium	101		P	80 - 120
1434487	Magnesium	101		P	80 - 120
1434487	Potassium	107		P	80 - 120
1434487	Sodium	105		P	80 - 120
1434494	Boron	104	102	P/P	80 - 120
1434494	Calcium	102		P	80 - 120
1434494	Magnesium	101		P	80 - 120
1434494	Potassium	107	103	P/P	80 - 120
1434494	Sodium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241152

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434108	Chloride	99.1		P	90 - 110
1434461	Chloride	101	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434108	Sulfate	97.9		P	90 - 110
1434461	Sulfate	96.8	96.2	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434471	Ammonia-N	103	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434680	Ammonia-N	97.4	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P240999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434466	Kjeldahl Nitrogen	100	90.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P241117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434474	Kjeldahl Nitrogen	89.2	88.4	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434404	NO2NO3-N	96.8	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434469	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434325	Total-P	101	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434472	Total-P	99.6	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240744

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434484	O-Phosphate-P	101	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00

Batch ID: P240947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1434465	Organic Carbon	97.8	99.1	P/P	85 - 115

Quality Assurance Report Precision

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

Batch ID: P240873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434123	Sucralose	9.81	Spike	P	0 - 30
LFB	Sucralose	5.94	LCS	P	0 - 30

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

Batch ID: P240965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434701	Sucralose	7.39	Spike	P	0 - 30
LFB	Sucralose	8.58	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P240726

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434459	Turbidity	3.51	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P241083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434494	Boron	1.31	Spike	P	0 - 20
1434494	Calcium	0.00614	Sample	P	0 - 20
1434494	Magnesium	1.71	Sample	P	0 - 20
1434494	Potassium	0.701	Sample	P	0 - 20
1434494	Sodium	0.0547	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241152

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434461	Chloride	0.444	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P241153

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434461	Sulfate	0.479	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240850

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434471	Ammonia-N	2.21	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P240927

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434680	Ammonia-N	0.160	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P240999

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434466	Kjeldahl Nitrogen	8.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P241117

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434474	Kjeldahl Nitrogen	0.706	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240985

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434404	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P240986

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434469	NO2NO3-N	0.633	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240899

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434325	Total-P	0.995	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P240900

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434472	Total-P	5.38	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P240744

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434484	O-Phosphate-P	1.23	Spike	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P240804

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1433813	Alkalinity	0.0122	Sample	P	0 - 20
1434461	Alkalinity	0.682	Sample	P	0 - 20

Reference Method: SM 2540 C-97

Batch ID: P241087

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434403	TDS	5.57	Sample	P	0 - 10

Reference Method: SM 2540 C-97

Batch ID: P241088

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434464	TDS	3.15	Sample	P	0 - 10

Reference Method: SM 5310 B-00

Batch ID: P240947

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1434465	Organic Carbon	1.27	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: 1434495

Field Sample ID: GINNIE SPRINGS

Reference Method

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

Surrogate

Sucralose-d6

% Rec.

41.9

Pass/Fail

P

Control Limits

40 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1434496

Field Sample ID: DEVIL'S EYE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	43.1	P	40 - 150

Lab Sample ID: 1434497

Field Sample ID: GILCHRIST BLUE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	52.2	P	40 - 150

Lab Sample ID: 1434498

Field Sample ID: POE SPRING

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	49.4	P	40 - 150

Lab Sample ID: 1434499

Field Sample ID: LITTLE RIVER SPRING

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	40.7	P	40 - 150

Lab Sample ID: 1434500

Field Sample ID: ICHETUCKNEE HEAD

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	48.3	P	40 - 150

Lab Sample ID: 1434501

Field Sample ID: BLUE HOLE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	43.5	P	40 - 150

Lab Sample ID: 1434503

Field Sample ID: TROY SPRING

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	45.3	P	40 - 150

Lab Sample ID: 1434504

Field Sample ID: LAFAYETTE BLUE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	47.2	P	40 - 150

Quality Assurance Report Calibration Verification

Quality Assurance Report

Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A45512

Included Lab Sample IDs: 1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A45521

Included Lab Sample IDs: 1434475, 1434476, 1434477, 1434478, 1434479, 1434480, 1434481, 1434482, 1434483, 1434484

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	99.3	P/P	90 - 110
O-Phosphate-P	99.3	98.4	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A45541

Included Lab Sample IDs: 1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alkalinity	103	102	P/P	85 - 115

Reference Method: SM 2120 B

Run ID: A45545

Included Lab Sample IDs: 1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A45558

Included Lab Sample IDs: 1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	106	99.3	P/P	90 - 110
Ammonia-N	99.3	102	P/P	90 - 110

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

Run ID: A45569

Included Lab Sample IDs: 1434495, 1434496, 1434498

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	94.0	104	P/P	70 - 140

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A45586

Included Lab Sample IDs: 1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.6	98.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A45598

Included Lab Sample IDs: 1434472, 1434473, 1434474

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A45598

Included Lab Sample IDs: 1434472, 1434473, 1434474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	100	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A45604

Included Lab Sample IDs: 1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.3	100	P/P	85 - 115

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

Run ID: A45613

Included Lab Sample IDs: 1434497, 1434499, 1434500, 1434501, 1434503, 1434504

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	75.6	90.8	P/P	70 - 140
Sucralose	90.0	87.6	P/P	70 - 140
Sucralose	90.8	86.4	P/P	70 - 140

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A45619

Included Lab Sample IDs: 1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.4	99.6	P/P	90 - 110
NO2NO3-N	96.8	96.4	P/P	90 - 110
NO2NO3-N	96.8	96.8	P/P	90 - 110
NO2NO3-N	99.6	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A45628

Included Lab Sample IDs: 1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	92.2	P/P	90 - 110
Kjeldahl Nitrogen	92.2	104	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A45674

Included Lab Sample IDs: 1434485, 1434486, 1434487, 1434488, 1434489, 1434490, 1434491, 1434492, 1434493, 1434494

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	100	99.5	P/P	90 - 110
Boron	101	100	P/P	90 - 110
Boron	101	101	P/P	95 - 105
Calcium	102	103	P/P	95 - 105
Calcium	103	104	P/P	90 - 110
Calcium	104	103	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Magnesium	102	102	P/P	95 - 105
Potassium	100	100	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A45674

Included Lab Sample IDs: 1434485, 1434486, 1434487, 1434488, 1434489, 1434490, 1434491, 1434492, 1434493, 1434494

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	101	100	P/P	95 - 105
Potassium	100	99.8	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Sodium	102	101	P/P	95 - 105

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A45690

Included Lab Sample IDs: 1434474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	104	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A45709

Included Lab Sample IDs: 1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	103	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Chloride	104	103	P/P	90 - 110
Sulfate	100	98.1	P/P	90 - 110
Sulfate	95.0	97.8	P/P	90 - 110
Sulfate	97.8	95.0	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
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose	58.8	62.4	67.2	75.6		5.94		9.81
	Sucralose	63.2	58.0	54.1	46.2		8.58		7.39
EPA 180.1 Rev. 2.0	Turbidity							3.51	
EPA 200.7 Rev. 4.4	Boron	99.6		103	104	102			1.31
	Calcium	103		101	102			0.0061	
	Magnesium	101		101	101			1.71	
	Potassium	104		107	107	103		0.701	
	Sodium	101		105	101			0.0547	
EPA 300.0 Rev. 2.1	Chloride	100		101	101	99.1			0.444
	Sulfate	95.5		96.8	96.2	97.9			0.479
EPA 350.1 Rev. 2.0	Ammonia-N	101		103	105				2.21
	Ammonia-N	100		97.4	97.6				0.160
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.6		100	90.9				8.62
	Kjeldahl Nitrogen	107		89.2	88.4				0.706
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5		96.8	97.2				0.482

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 353.2 Rev. 2.0	NO2NO3-N	100	101	100			0.633
EPA 365.1 Rev. 2.0	Total-P	107	101	99.8			0.995
	Total-P	105	99.6	106			5.38
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	101	103			1.23
SM 2320 B-97	Alkalinity	101				0.0122 0.682	
SM 2540 C-97	TDS					5.57	
	TDS					3.15	
SM 5310 B-00	Organic Carbon	97.8	97.8	99.1			1.27

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	1434495, 1434496, 1434497, 1434498, 1434499, 1434500, 1434501, 1434503, 1434504
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1434485, 1434486, 1434487, 1434488, 1434489, 1434490, 1434491, 1434492, 1434493, 1434494
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1434475, 1434476, 1434477, 1434478, 1434479, 1434480, 1434481, 1434482, 1434483, 1434484
SM 2120 B / E31780	True Color measured at 450 nm or Apparent Color	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474

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)	06/08/2012	06/11/2012	Hoor Shaik	06/12/2012	Mohammad Ghaffari	1434495, 1434496, 1434498
	06/08/2012	06/11/2012	Hoor Shaik	06/13/2012	Mohammad Ghaffari	1434497
	06/08/2012	06/12/2012	Hoor Shaik	06/14/2012	Mohammad Ghaffari	1434499, 1434500, 1434501, 1434503, 1434504
EPA 180.1 Rev. 2.0	06/08/2012			06/08/2012 17:39	Bryan A. Werth	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
EPA 200.7 Rev. 4.4	06/08/2012	06/14/2012	Elliott D. Healy	06/18/2012	Joshua Ayres	1434485, 1434486, 1434487, 1434488, 1434489, 1434490, 1434491, 1434492, 1434493, 1434494
EPA 300.0 Rev. 2.1	06/08/2012			06/15/2012	Gary Dearman	1434455, 1434456, 1434457, 1434461
	06/08/2012			06/16/2012	Gary Dearman	1434458, 1434459, 1434460, 1434462, 1434463, 1434464
EPA 350.1 Rev. 2.0	06/08/2012			06/12/2012	Peter D. Kaus	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471
EPA 351.2 Rev. 2.0	06/08/2012			06/13/2012	Peter D. Kaus	1434472, 1434473, 1434474
	06/08/2012	06/13/2012	Bryan A. Werth	06/14/2012	Christopher Armour	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473
EPA 353.2 Rev. 2.0	06/08/2012	06/15/2012	Bryan A. Werth	06/18/2012	Bryan A. Werth	1434474
	06/08/2012			06/14/2012	Sima Feizi	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474
EPA 365.1 Rev. 2.0	06/08/2012	06/12/2012	Megan E. Faircloth	06/13/2012	Pallavi R. Gadwal	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474
EPA 365.1 Rev. 2.0 dissolved	06/08/2012			06/08/2012 16:53	Pallavi R. Gadwal	1434484
	06/08/2012			06/08/2012 16:56	Pallavi R. Gadwal	1434481
	06/08/2012			06/08/2012 16:57	Pallavi R. Gadwal	1434477
	06/08/2012			06/08/2012 16:58	Pallavi R. Gadwal	1434475, 1434480
	06/08/2012			06/08/2012 16:59	Pallavi R. Gadwal	1434476
	06/08/2012			06/08/2012 17:04	Pallavi R. Gadwal	1434479, 1434483
	06/08/2012			06/08/2012 17:05	Pallavi R. Gadwal	1434478
	06/08/2012			06/08/2012 17:06	Pallavi R. Gadwal	1434482
	06/08/2012			06/08/2012 16:52	Blanca Fach	1434455
SM 2120 B	06/08/2012			06/08/2012 16:53	Blanca Fach	1434456
	06/08/2012			06/08/2012 16:54	Blanca Fach	1434457
	06/08/2012			06/08/2012 16:55	Blanca Fach	1434458
	06/08/2012			06/08/2012 16:56	Blanca Fach	1434459
	06/08/2012			06/08/2012 16:57	Blanca Fach	1434460, 1434461
	06/08/2012			06/08/2012 16:58	Blanca Fach	1434462
	06/08/2012			06/08/2012 16:59	Blanca Fach	1434463

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	06/08/2012			06/08/2012 17:00	Blanca Fach	1434464
SM 2320 B-97	06/08/2012			06/11/2012	Dale L. Simmons	1434461
	06/08/2012			06/12/2012	Dale L. Simmons	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434462, 1434463, 1434464
SM 2540 C-97	06/08/2012			06/12/2012	Yijie Li	1434455, 1434456, 1434457, 1434458, 1434459, 1434460, 1434461, 1434462, 1434463, 1434464
SM 5310 B-00	06/08/2012			06/13/2012	Dale L. Simmons	1434465, 1434466, 1434467, 1434468, 1434469, 1434470, 1434471, 1434472, 1434473, 1434474