

Chemical Analysis Report

NE-DIST-2024-01-25-02

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Suwannee Central**
Request ID: **RQ-2024-01-08-51**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 16-FEB-2024 10:42



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals and Nutrients.

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.

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.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Sample Location: SWIFT CREEK POND CENTER

Collection Date/Time: 01/24/2024 10:10

Field ID: 21030066

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2463374	DEP SOP: NU-094-1	Color (true)	340		PCU	P440451	
	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P440459	
	EPA 300.0 Rev. 2.1	Chloride	6.9		mg Cl/L	P440893	
		Sulfate	0.78		mg SO4/L	P440896	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P440873	
	SM 2540 C-2015	TDS	74		mg/L	P440998	RPD
	SM 2540 D-2015	TSS	4	I	mg/L	P440829	
	SM 4500-F- C-2011	Fluoride	0.033	I	mg F/L	P440876	RPD
2463375	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P440794	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.91		mg N/L	P440942	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.				

Sample Location: NEW RIVER AT SR 125

Collection Date/Time: 01/24/2024 11:10

Field ID: 21030082

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2463370	DEP SOP: NU-094-1	Color (true)	240		PCU	P440451	
	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P440459	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P440893	
		Sulfate	3.9		mg SO4/L	P440896	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P440873	
	SM 2540 C-2015	TDS	91		mg/L	P440998	RPD
	SM 2540 D-2015	TSS	2	I	mg/L	P440829	
	SM 4500-F- C-2011	Fluoride	0.028	I	mg F/L	P440876	RPD
2463372	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P440793	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P440942	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P440705	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P440659	
	SM 5310 B-2014						

Sample Location: ALLIGATOR CREEK AT NW CR225

Collection Date/Time: 01/24/2024 11:30

Field ID: G1NE0957

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2463368	DEP SOP: NU-094-1	Color (true)	210		PCU	P440451	
	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P440459	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P440893	
		Sulfate	1.4		mg SO4/L	P440896	
	SM 2320 B-2011	Total Alkalinity	5.8		mg CaCO3/L	P440873	
	SM 2540 C-2015	TDS	103		mg/L	P440998	RPD
	SM 2540 D-2015	TSS	2	I	mg/L	P440829	
	SM 4500-F- C-2011	Fluoride	0.035	I	mg F/L	P440876	RPD
2463369	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P440793	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P440942	
	EPA 353.2 Rev. 2.0	NO2NO3-N					

Sample Location: SANTA FE RIVER AT CR325

Collection Date/Time: 01/24/2024 12:20

Field ID: 21030114

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2463371	DEP SOP: NU-094-1	Color (true)	170		PCU	P440451	
	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P440459	
	EPA 300.0 Rev. 2.1	Chloride	7.5		mg Cl/L	P440893	
		Sulfate	0.20	U	mg SO4/L	P440896	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P440873	
	SM 2540 C-2015	TDS	67		mg/L	P440998	RPD
	SM 2540 D-2015	TSS	2	U	mg/L	P440829	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P440876	RPD
2463373	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P440793	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P440942	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P440705	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P440659	

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P440451

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440459

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440528

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P440528

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P440896

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440793

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440794

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440942

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440704

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440705

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440659

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P440998

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P440829

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P440876

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P440712

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P440451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440459

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440528

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	112		P	85 - 115
Iron	112		P	85 - 115
Magnesium	112		P	85 - 115
Potassium	102		P	85 - 115
Sodium	105		P	85 - 115
Strontium	97.0		P	85 - 115
Tin	95.7		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	97.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P440528

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	98.5		P	85 - 115
Arsenic				

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P440896

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440794

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.1		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440704

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440659

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P440998

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.2		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P440829

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.4		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P440876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	103		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P440712

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463330	Calcium	111		P	80 - 120
2463330	Iron	117	117	P/P	80 - 120
2463330	Magnesium	117	116	P/P	80 - 120
2463330	Potassium	102	102	P/P	80 - 120
2463330	Sodium	104		P	80 - 120
2463330	Strontium	96.9	95.7	P/P	80 - 120
2463330	Tin	93.9	93.6	P/P	80 - 120
2463330	Titanium	99.5	98.3	P/P	80 - 120
2463330	Vanadium	104	103	P/P	80 - 120
2463330	Zinc	99.9	99.0	P/P	80 - 120
2463384	Calcium	111		P	80 - 120
2463384	Iron	116		P	80 - 120
2463384	Magnesium	115		P	80 - 120
2463384	Potassium	102		P	80 - 120
2463384	Sodium	104		P	80 - 120
2463384	Strontium	95.3		P	80 - 120
2463384	Tin	91.4		P	80 - 120
2463384	Titanium	99.3		P	80 -

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P440528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463384	Lead	93.9		P	80 - 120
2463384	Manganese	98.4		P	80 - 120
2463384	Molybdenum	98.2		P	80 - 120
2463384	Nickel	92.0		P	80 - 120
2463384	Selenium	97.4		P	80 - 120
2463384	Silver	94.7		P	80 - 120
2463384	Thallium	100		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P440893

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463312	Chloride	101		P	90 - 110
2463519	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P440896

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463312	Sulfate	99.4		P	90 - 110
2463519	Sulfate	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440793

Spiked Sample	Component	% Rec.1</
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Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440659

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463401	Total-P	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464528	Total-P	106	108	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P440876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2463552	Fluoride	98.1	103	P/P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P440712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2462951	Organic Carbon	99.3	99.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P440451

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463285	Color (true)	1.20	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440459

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463272	Turbidity	2.03	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440528

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463330	Calcium	1.77	Spike	P	0 - 20
2463330	Iron	0.163	Spike	P	0 - 20
2463330	Magnesium	0.487	Spike	P	0 - 20
2463330	Potassium	0.169	Spike	P	0 - 20
2463330	Sodium	1.25	Spike	P	0 - 20
2463330	Strontium	1.26	Spike	P	0 - 20
2463330	Tin	0.348	Spike	P	0 - 20
2463330	Titanium	1.16	Spike	P	0 - 20
2463330	Vanadium	0.962	Spike		

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P440893

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463312	Chloride	1.64	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P440896

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463312	Sulfate	1.68	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463282	Ammonia-N	0.520	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P440794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463375	Ammonia-N	1.11	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463373	Kjeldahl Nitrogen	0.176	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440704

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464528	Total-P	1.79	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P440873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463552	Total Alkalinity	1.21	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P440998

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463397	TDS	10.2	Sample	F	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P440876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2463552	Fluoride	4.51	Spike	F	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P440712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2462951	Organic Carbon	0.285	Spike	P	0 - 15

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report

Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A123821

Included Lab Sample IDs: 2463368, 2463370, 2463371, 2463374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A123828

Included Lab Sample IDs: 2463368, 2463370, 2463371, 2463374

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A123888

Included Lab Sample IDs: 2463384, 2463385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.6	98.9	P/P	90 - 110
Antimony	97.8	97.8	P/P	90 - 110
Arsenic	94.4	94.9	P/P	90 - 110
Barium	97.8	96.8	P/P	90 - 110
Beryllium	96.9	95.7	P/P	90 - 110
Boron	105	103	P/P	90 - 110
Cadmium	97.0	95.9	P/P	90 - 110
Chromium	95.2	95.1	P/P	90 - 110
Cobalt	93.3	93.0	P/P	90 - 110
Copper	94.3	93.8	P/P	90 - 110</

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A123917
Included Lab Sample IDs: 2463369, 2463372, 2463373, 2463375

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A123918
Included Lab Sample IDs: 2463369, 2463372, 2463373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A123945
Included Lab Sample IDs: 2463369, 2463372, 2463373, 2463375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	103	P/P	90 - 110
Ammonia-N	103	104	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A123977
Included Lab Sample IDs: 2463368, 2463370, 2463371, 2463374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.4	97.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A123977
Included Lab Sample IDs: 2463368, 2463370, 2463371, 2463374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Flu				

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A124121

Included Lab Sample IDs: 2463384, 2463385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	108	109	P/P	90 - 110
Calcium	109	109	P/P	90 - 110
Iron	108	108	P/P	90 - 110
Iron	108	108	P/P	90 - 110
Magnesium	107	107	P/P	90 - 110
Magnesium	107	107	P/P	90 - 110
Potassium	103	104	P/P	90 - 110
Potassium	104	104	P/P	90 - 110
Sodium	102	103	P/P	90 - 110
Sodium	103	104	P/P	90 - 110
Strontium	95.6	98.1	P/P	90 - 110
Strontium	98.1	98.5	P/P	90 - 110
Tin	97.9	97.7	P/P	90 - 110
Tin	98.6	97.9	P/P	90 - 110
Titanium	100	100	P/P	90 - 110
Titanium	100	100	P/P	90 - 110
Vanadium	103	103	P/P	90 - 110
Vanadium	103	103	P/P	90 - 110
Zinc	103	103	P/P	90 - 110
Zinc	103	103	P/P	90 - 110

Quality Assurance Report

Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision	MS
			LCS	SMP	MS		
DEP SOP: NU-094-1	Color (true)	102				1.20	
EPA 180.1 Rev. 2.0	Turbidity	104				2.03	
EPA 200.7 Rev. 4.4	Calcium	112	111	111			1.77
	Iron	112	117	117	116		0.163
	Magnesium	112	117	116	115		0.487
	Potassium	102	102	102	102		0.169
	Sodium	105	104	104			1.25
	Strontium	97.0	96.9	95.7	95.3		1.26
	Tin	95.7	93.9	93.6	91.4		0.348
	Titanium	101	99.5	98.3	99.3		1.16
	Vanadium	102	104	103	101		0.962
	Zinc	97.9	99.9	99.0	98.2		0.937
EPA 200.8 Rev. 5.4	Aluminum	102	102	101	98.7		0.592
	Antimony	98.5	99.3	99.2			

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2463368, 2463370, 2463371, 2463374
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2463368, 2463370, 2463371, 2463374
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2463369, 2463372, 2463373, 2463375
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2463369, 2463372, 2463373, 2463375
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2463369, 2463372, 2463373, 2463375
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2463369, 2463372, 2463373, 2463375
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2463368, 2463370, 2463371, 2463374
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2463384, 2463385
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2463368, 2463370, 2463371, 2463374
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2463368, 2463370, 2463371, 2463374
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2463368, 2463370, 2463371, 2463374
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2463369, 2463372, 2463373, 2463375

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	01/25/2024			01/25/2024 13:59	Chandler E Cox	2463368
	01/25/2024			01/25/2024 14:00	Chandler E Cox	2463370
	01/25/2024			01/25/2024 14:01	Chandler E Cox	2463371, 2463374
EPA 180.1 Rev. 2.0	01/25/2024			01/25/2024 13:24	Anna M. Plaviak	2463368
	01/25/2024			01/25/2024 13:25	Anna M. Plaviak	2463370, 2463371
	01/25/2024			01/25/2024 13:26	Anna M. Plaviak	2463374
EPA 200.7 Rev. 4.4	01/25/2024	01/26/2024 11:25	George D Taylor	02/12/2024 19:48	Chase Roberts	2463384
	01/25/2024	01/26/2024 11:25	George D Taylor	02/12/2024 20:34	Chase Roberts	2463385
EPA 200.8 Rev. 5.4	01/25/2024	01/26/2024 11:25	George D Taylor	01/29/2024 19:18	Conrad Hartmann	2463385
	01/25/2024	01/26/2024 11:25	George D Taylor	01/29/2024 19:37	Conrad Hartmann	2463384
EPA 300.0 Rev. 2.1	0					

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500-F- C-2011	01/25/2024			02/01/2024 08:14	Dale L. Simmons	2463371
	01/25/2024			02/01/2024 08:23	Dale L. Simmons	2463374
SM 5310 B-2014	01/25/2024			01/30/2024 09:06	Khloe J Berg	2463369
	01/25/2024			01/30/2024 09:20	Khloe J Berg	2463372
	01/25/2024			01/30/2024 09:35	Khloe J Berg	2463373
	01/25/2024			01/30/2024 09:49	Khloe J Berg	2463375