

Chemical Analysis Report

SW-DIST-2022-08-31-03

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

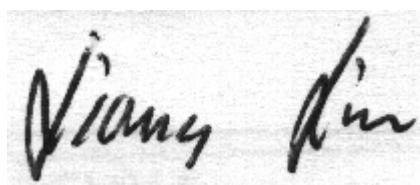
Event Description: **McKay Bay @ Tidal**
Request ID: **RQ-2022-08-29-33**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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FL Dept. of Environmental Protection
13051 N. Telecom Parkway
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 19-SEP-2022 15:37

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

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 group are included in this report: 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.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- 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 and/or the analysis did not meet established quality control criteria.
- 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).

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.

Sample Location: McKay Tidal South of Harbor Cir

Collection Date/Time: 08/30/2022 10:30

Field ID: G5SW0152

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353241	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P418945	
	SM 2320 B-2011	Total Alkalinity	114		mg CaCO3/L	P419034	
	SM 2540 D-2011	TSS	3	U	mg/L	P419323	RPD
	SM 4500-F- C-2011	Fluoride	0.85		mg F/L	P419280	
2353242	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P419155	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P419095	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P418995	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P419038	
	SM 5310 B-2011	Organic Carbon	7.4		mg C/L	P419189	
2353243	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P418944	

Sample Location: FB

Collection Date/Time: 08/30/2022 10:45

Field ID: FB_08302022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353244	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P418945	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P419035	
	SM 2540 D-2011	TSS	2	U	mg/L	P419322	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P419623	
2353245	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P419157	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P419097	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P419214	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P419039	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P419186	
2353246	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P418944	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418945

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419155

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419157

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419095

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419097

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418995

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419214

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419038

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419039

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418944

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

Reference Method: SM 2320 B-2011
Batch ID: P419034

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

Reference Method: SM 2320 B-2011
Batch ID: P419035

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

Reference Method: SM 2540 D-2011
Batch ID: P419322

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P419323

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P419280

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P419623

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P419186

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

Reference Method: SM 5310 B-2011
Batch ID: P419189

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418945

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419155

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419157

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419095

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419097

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418995

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419214

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419038

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419039

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418944

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.4		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P419034

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P419035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	106		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P419280

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P419623

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419186

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.5		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P419189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353121	Ammonia-N	98.0	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419157

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353216	Ammonia-N	98.8	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353259	Kjeldahl Nitrogen	97.3	95.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353121	NO2NO3-N	101	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419214

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353294	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353260	Total-P	92.6	92.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419039

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353290	Total-P	106	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418944

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353243	O-Phosphate-P	100	97.4	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P419280

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353473	Fluoride	97.8	98.5	P/P	94 - 104

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P419623

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353393	Fluoride	98.2	97.5	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419186

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353290	Organic Carbon	96.4	96.4	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P419189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353610	Organic Carbon	91.2	89.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353117	Turbidity	2.13	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353121	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419157

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353216	Ammonia-N	0.359	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353259	Kjeldahl Nitrogen	1.52	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353316	Kjeldahl Nitrogen	2.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353121	NO2NO3-N	1.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353294	NO2NO3-N	0.480	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419038

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353260	Total-P	0.162	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P419039

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353290	Total-P	0.910	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P418944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353243	O-Phosphate-P	2.08	Spike	P	0 - 20

Reference Method: SM 2320 B-2011

Batch ID: P419034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353215	Total Alkalinity	1.95	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011

Batch ID: P419035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353351	Total Alkalinity	0.596	Sample	P	0 - 3.8

Reference Method: SM 2540 D-2011

Batch ID: P419323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352962	TSS	10.9	Sample	F	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P419280

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353473	Fluoride	0.470	Spike	P	0 - 1.6

Reference Method: SM 4500-F- C-2011

Batch ID: P419623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353393	Fluoride	0.476	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011

Batch ID: P419186

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353290	Organic Carbon	0.0	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011

Batch ID: P419189

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353610	Organic Carbon	1.65	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A114460

Included Lab Sample IDs: 2353243, 2353246

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A114462

Included Lab Sample IDs: 2353241, 2353244

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114483

Included Lab Sample IDs: 2353242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	105	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A114506

Included Lab Sample IDs: 2353241, 2353244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.0	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114548

Included Lab Sample IDs: 2353242, 2353245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	98.8	P/P	90 - 110
Total-P	99.5	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114553

Included Lab Sample IDs: 2353242, 2353245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.9	100	P/P	90 - 110
Ammonia-N	99.7	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114569

Included Lab Sample IDs: 2353242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	105	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A114570

Included Lab Sample IDs: 2353245

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

Reference Method: SM 5310 B-2011
Run ID: A114570
Included Lab Sample IDs: 2353245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	95.2	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A114572
Included Lab Sample IDs: 2353242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	90.2	95.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A114574
Included Lab Sample IDs: 2353245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114576
Included Lab Sample IDs: 2353245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A114599
Included Lab Sample IDs: 2353241

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

Reference Method: SM 4500-F- C-2011
Run ID: A114739
Included Lab Sample IDs: 2353244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	99.5	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity	96.3				2.13	
EPA 350.1 Rev. 2.0	Ammonia-N	97.8	98.0	98.0			0.0
	Ammonia-N	99.0	98.8	99.4			0.359
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	97.3	95.2			1.52
	Kjeldahl Nitrogen	94.9					2.05
EPA 353.2 Rev. 2.0	NO2NO3-N	106	101	103			1.96
	NO2NO3-N	103	104	104			0.480
EPA 365.1 Rev. 2.0	Total-P	103	92.6	92.7			0.162
	Total-P	102	106	105			0.910
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	100	97.4			2.08
SM 2320 B-2011	Total Alkalinity	104				1.95	
	Total Alkalinity	106				0.596	
SM 2540 D-2011	TSS					10.9	
SM 4500-F- C-2011	Fluoride	102	97.8	98.5			0.470
	Fluoride	99.0	98.2	97.5			0.476
SM 5310 B-2011	Organic Carbon	96.5	96.4	96.4			0.0
	Organic Carbon	96.6	91.2	89.3			1.65

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2353241, 2353244
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2353242, 2353245
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2353242, 2353245
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2353242, 2353245
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2353242, 2353245
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2353243, 2353246
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2353241, 2353244
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2353241, 2353244
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2353241, 2353244
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2353242, 2353245

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	08/31/2022			08/31/2022 13:33	Chandler E Cox	2353241
	08/31/2022			08/31/2022 13:35	Chandler E Cox	2353244
EPA 350.1 Rev. 2.0	08/31/2022			09/06/2022 13:40	Judith K. Clark	2353242
	08/31/2022			09/06/2022 14:32	Judith K. Clark	2353245
EPA 351.2 Rev. 2.0	08/31/2022	09/06/2022 14:30	Alexandra J Mattheus	09/07/2022 10:23	Alexandra J Mattheus	2353242
	08/31/2022	09/06/2022 14:30	Alexandra J Mattheus	09/07/2022 11:26	Alexandra J Mattheus	2353245
EPA 353.2 Rev. 2.0	08/31/2022			09/01/2022 13:01	Judith K. Clark	2353242
	08/31/2022			09/07/2022 11:20	Beverly Y. Sanders	2353245
EPA 365.1 Rev. 2.0	08/31/2022	09/02/2022 10:28	Simonne.V. Calhoun	09/06/2022 12:46	James L Waggerby	2353242
	08/31/2022	09/02/2022 10:28	Simonne.V. Calhoun	09/06/2022 13:00	James L Waggerby	2353245
EPA 365.1 Rev. 2.0 dissolved	08/31/2022			08/31/2022 15:30	Elise M. Gillis	2353243
	08/31/2022			08/31/2022 15:32	Elise M. Gillis	2353246
SM 2320 B-2011	08/31/2022			09/02/2022 04:03	Dale L. Simmons	2353241
	08/31/2022			09/02/2022 04:51	Dale L. Simmons	2353244
SM 2540 D-2011	08/31/2022			09/02/2022 16:08	Yijie Li	2353241, 2353244
SM 4500-F- C-2011	08/31/2022			09/08/2022 01:23	Adam P Silver	2353241
	08/31/2022			09/15/2022 03:54	Dale L. Simmons	2353244
SM 5310 B-2011	08/31/2022			09/07/2022 03:17	Khloe J Berg	2353245
	08/31/2022			09/07/2022 04:42	Khloe J Berg	2353242