

Chemical Analysis Report

NW-DIST-2022-10-26-02

Florida DEP Laboratory
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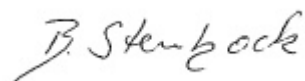
Event Description: **Hogtown Bayou Run**
Request ID: **RQ-2022-10-24-13**
Customer: **NW-DIST**
Project ID: **SMP**

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Date Certified: 17-NOV-2022 18:42



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 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: Hewett Bayou Center

Collection Date/Time: 10/25/2022 11:30

Field ID: G3NW0218

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2365148	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P421472	
	SM 2320 B-2011	Total Alkalinity	97		mg CaCO3/L	P421661	
	SM 2540 D-2015	TSS	3	U	mg/L	P421785	
	SM 4500-F- C-2011	Fluoride	0.85		mg F/L	P421665	
2365154	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P421684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P421694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422023	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P421602	
	SM 5310 B-2011	Organic Carbon	2.9	I	mg C/L	P422187	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Mack Bayou Center

Collection Date/Time: 10/25/2022 11:10

Field ID: G3NW0185

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2365149	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P421472	
	SM 2320 B-2011	Total Alkalinity	96		mg CaCO3/L	P421661	
	SM 2540 D-2015	TSS	4	I	mg/L	P421785	
	SM 4500-F- C-2011	Fluoride	0.85		mg F/L	P421665	
2365155	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P421684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23	I	mg N/L	P421694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422023	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P421602	
	SM 5310 B-2011	Organic Carbon	3.1	I	mg C/L	P422187	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Buck Bayou Center

Collection Date/Time: 10/25/2022 10:55

Field ID: G3NW0233

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2365150	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P421472	
	SM 2320 B-2011	Total Alkalinity	97	A	mg CaCO3/L	P421661	
	SM 2540 D-2015	TSS	10		mg/L	P421785	
	SM 4500-F- C-2011	Fluoride	0.86		mg F/L	P421665	
2365156	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P421684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	I	mg N/L	P421694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422023	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P421602	
	SM 5310 B-2011	Organic Carbon	3.1	I	mg C/L	P422187	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Churchill Bayou Center

Collection Date/Time: 10/25/2022 12:10

Field ID: G3NW0235

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2365151	EPA 180.1 Rev. 2.0	Turbidity	4.7		NTU	P421472	
	SM 2320 B-2011	Total Alkalinity	102		mg CaCO3/L	P421661	
	SM 2540 D-2015	TSS	19		mg/L	P421786	
	SM 4500-F- C-2011	Fluoride	0.96		mg F/L	P421665	
2365157	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P421684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38	I	mg N/L	P421699	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422023	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P421602	
	SM 5310 B-2011	Organic Carbon	3.2	I	mg C/L	P422187	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Hogtown Bayou at Cessna Park

Collection Date/Time: 10/25/2022 12:25

Field ID: G3NW0152

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2365152	EPA 180.1 Rev. 2.0	Turbidity	4.7		NTU	P421472	
	SM 2320 B-2011	Total Alkalinity	106		mg CaCO3/L	P421661	
	SM 2540 D-2015	TSS	10	I	mg/L	P421786	
	SM 4500-F- C-2011	Fluoride	1.1		mg F/L	P421665	
2365158	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P421684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P421699	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422023	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P421602	
	SM 5310 B-2011	Organic Carbon	3.2	I	mg C/L	P422187	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Mussett Bayou Center

Collection Date/Time: 10/25/2022 11:55

Field ID: G3NW0234

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2365153	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P421472	
	SM 2320 B-2011	Total Alkalinity	99		mg CaCO3/L	P421661	
	SM 2540 D-2015	TSS	4	IA	mg/L	P421786	
	SM 4500-F- C-2011	Fluoride	0.91		mg F/L	P421665	
2365159	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P421684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P421694	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422023	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P421602	
	SM 5310 B-2011	Organic Carbon	3.0	I	mg C/L	P422187	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421472

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421684

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421694

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421699

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422023

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421602

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

Reference Method: SM 2320 B-2011
Batch ID: P421661

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 D-2015
Batch ID: P421785

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P421786

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P421665

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P422187

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: P421472

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421684

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: P421694

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421699

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.4		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422023

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421602

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

Reference Method: SM 2320 B-2011
Batch ID: P421661

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	94 - 106

Reference Method: SM 2540 D-2015
Batch ID: P421785

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.1		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P421786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.1		P	85 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P421665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422187

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365154	Ammonia-N	105	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421694

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365212	Kjeldahl Nitrogen	102	99.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421699

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365303	Kjeldahl Nitrogen	98.1	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422023

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365100	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365155	Total-P	104	105	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P421665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2365150	Fluoride	97.5	98.2	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2366264	Organic Carbon	90.0	91.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421472

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365325	Turbidity	12.2	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365154	Ammonia-N	0.570	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421694

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365212	Kjeldahl Nitrogen	1.68	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421699

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365303	Kjeldahl Nitrogen	0.00519	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422023

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365100	NO2NO3-N	0.471	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365155	Total-P	0.957	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P421661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365150	Total Alkalinity	0.794	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011
Batch ID: P421665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2365150	Fluoride	0.483	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P422187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2366264	Organic Carbon	1.38	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A115543

Included Lab Sample IDs: 2365148, 2365149, 2365150, 2365151, 2365152, 2365153

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

Reference Method: SM 2320 B-2011

Run ID: A115624

Included Lab Sample IDs: 2365148, 2365149, 2365150, 2365151, 2365152, 2365153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	104	P/P	90 - 110
Total Alkalinity	99.7	98.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A115624

Included Lab Sample IDs: 2365148, 2365149, 2365150, 2365151, 2365152, 2365153

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A115636

Included Lab Sample IDs: 2365154, 2365155, 2365156, 2365157, 2365158, 2365159

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A115637

Included Lab Sample IDs: 2365154, 2365155, 2365156, 2365157, 2365158, 2365159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.7	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A115712

Included Lab Sample IDs: 2365154, 2365155, 2365156, 2365159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	109	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A115722

Included Lab Sample IDs: 2365157, 2365158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A115782

Included Lab Sample IDs: 2365154, 2365155, 2365156, 2365157, 2365158, 2365159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	106	104	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A115847

Included Lab Sample IDs: 2365154, 2365155, 2365156, 2365157, 2365158, 2365159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.4	95.6	P/P	90 - 110
Organic Carbon	95.6	97.0	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		Precision	
					LCS	MS
EPA 180.1 Rev. 2.0	Turbidity	102			12.2	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	105	106		0.570
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	102	99.6		1.68
	Kjeldahl Nitrogen	97.4	98.1	98.1		0.0051
EPA 353.2 Rev. 2.0	NO2NO3-N	104	106	106		0.471
EPA 365.1 Rev. 2.0	Total-P	108	104	105		0.957
SM 2320 B-2011	Total Alkalinity	102			0.794	
SM 2540 D-2015	TSS	98.1				
	TSS	98.1				
SM 4500-F- C-2011	Fluoride	99.8	97.5	98.2		0.483
SM 5310 B-2011	Organic Carbon	98.3	90.0	91.7		1.38

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2365148, 2365149, 2365150, 2365151, 2365152, 2365153
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2365154, 2365155, 2365156, 2365157, 2365158, 2365159
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2365154, 2365155, 2365156, 2365157, 2365158, 2365159
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2365154, 2365155, 2365156, 2365157, 2365158, 2365159
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2365154, 2365155, 2365156, 2365157, 2365158, 2365159
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2365148, 2365149, 2365150, 2365151, 2365152, 2365153
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2365148, 2365149, 2365150, 2365151, 2365152, 2365153
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2365148, 2365149, 2365150, 2365151, 2365152, 2365153
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2365154, 2365155, 2365156, 2365157, 2365158, 2365159

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	10/26/2022			10/26/2022 14:23	Anna M. Plaviak	2365148
	10/26/2022			10/26/2022 14:24	Anna M. Plaviak	2365149
	10/26/2022			10/26/2022 14:25	Anna M. Plaviak	2365150
	10/26/2022			10/26/2022 14:27	Anna M. Plaviak	2365151
	10/26/2022			10/26/2022 14:29	Anna M. Plaviak	2365152
	10/26/2022			10/26/2022 14:31	Anna M. Plaviak	2365153
EPA 350.1 Rev. 2.0	10/26/2022			10/31/2022 13:26	Ping Hua	2365154
	10/26/2022			10/31/2022 13:31	Ping Hua	2365156
	10/26/2022			10/31/2022 13:33	Ping Hua	2365157
	10/26/2022			10/31/2022 13:34	Ping Hua	2365158
	10/26/2022			10/31/2022 13:35	Ping Hua	2365159
EPA 351.2 Rev. 2.0	10/26/2022			10/31/2022 13:39	Ping Hua	2365155
	10/26/2022	11/01/2022 11:59	Alexandra J Mattheus	11/02/2022 15:16	Samantha L Bates	2365154
	10/26/2022	11/01/2022 11:59	Alexandra J Mattheus	11/02/2022 15:18	Samantha L Bates	2365155
	10/26/2022	11/01/2022 11:59	Alexandra J Mattheus	11/02/2022 15:19	Samantha L Bates	2365156
	10/26/2022	11/01/2022 11:59	Alexandra J Mattheus	11/02/2022 15:21	Samantha L Bates	2365159
	10/26/2022	11/01/2022 12:07	Alexandra J Mattheus	11/03/2022 12:24	Samantha L Bates	2365157
EPA 353.2 Rev. 2.0	10/26/2022	11/01/2022 12:07	Alexandra J Mattheus	11/03/2022 12:25	Samantha L Bates	2365158
	10/26/2022			11/07/2022 09:48	Beverly Y. Sanders	2365154
	10/26/2022			11/07/2022 09:49	Beverly Y. Sanders	2365155
	10/26/2022			11/07/2022 09:50	Beverly Y. Sanders	2365156
	10/26/2022			11/07/2022 09:52	Beverly Y. Sanders	2365157
	10/26/2022			11/07/2022 09:53	Beverly Y. Sanders	2365158
EPA 365.1 Rev. 2.0	10/26/2022			11/07/2022 09:54	Beverly Y. Sanders	2365159
	10/26/2022	10/28/2022 12:34	Adam P Silver	10/31/2022 13:25	Simonne.V. Calhoun	2365155
	10/26/2022	10/28/2022 12:34	Adam P Silver	10/31/2022 13:28	Simonne.V. Calhoun	2365154
	10/26/2022	10/28/2022 12:34	Adam P Silver	10/31/2022 13:29	Simonne.V. Calhoun	2365156
	10/26/2022	10/28/2022 12:34	Adam P Silver	10/31/2022 13:30	Simonne.V. Calhoun	2365157
	10/26/2022	10/28/2022 12:34	Adam P Silver	10/31/2022 13:38	Simonne.V. Calhoun	2365158
SM 2320 B-2011	10/26/2022	10/28/2022 12:34	Adam P Silver	10/31/2022 13:39	Simonne.V. Calhoun	2365159
	10/26/2022			10/28/2022 01:41	Dale L. Simmons	2365150
	10/26/2022			10/28/2022 04:36	Dale L. Simmons	2365148
	10/26/2022			10/28/2022 04:47	Dale L. Simmons	2365149
	10/26/2022			10/28/2022 04:59	Dale L. Simmons	2365151
	10/26/2022			10/28/2022 05:11	Dale L. Simmons	2365152
SM 2540 D-2015	10/26/2022			10/28/2022 05:22	Dale L. Simmons	2365153
	10/26/2022			10/28/2022 15:58	Yijie Li	2365148, 2365149, 2365150, 2365151, 2365152, 2365153
SM 4500-F- C-2011	10/26/2022			10/27/2022 23:12	Dale L. Simmons	2365150
	10/26/2022			10/28/2022 00:49	Dale L. Simmons	2365148

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	10/26/2022			10/28/2022 00:55	Dale L. Simmons	2365149
	10/26/2022			10/28/2022 01:00	Dale L. Simmons	2365151
	10/26/2022			10/28/2022 01:05	Dale L. Simmons	2365152
	10/26/2022			10/28/2022 01:10	Dale L. Simmons	2365153
SM 5310 B-2011	10/26/2022			11/10/2022 02:32	Khloe J Berg	2365154
	10/26/2022			11/10/2022 02:57	Khloe J Berg	2365155
	10/26/2022			11/10/2022 03:18	Khloe J Berg	2365156
	10/26/2022			11/10/2022 03:33	Khloe J Berg	2365157
	10/26/2022			11/10/2022 03:45	Khloe J Berg	2365158
	10/26/2022			11/10/2022 04:37	Khloe J Berg	2365159