

Chemical Analysis Report

NW-DIST-2020-07-30-01

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

Event Description: **98 Whaler Run**
Request ID: **RQ-2020-07-27-19**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 21-AUG-2020 13:17



NON-CONFORMANCE REPORT INCLUDED

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: Joes Bayou

Collection Date/Time: 07/28/2020 10:55

Field ID: G3NW0182

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2187313	EPA 180.1 Rev. 2.0	Turbidity	1.7	Q	NTU	P385423	
	EPA 300.0 Rev. 2.1	Bromide	40		mg Br/L	P386265	
	SM 2320 B-2011	Total Alkalinity	84		mg CaCO3/L	P385565	
	SM 2540 D-2011	TSS	3	U	mg/L	P385704	
	SM 4500 F-C-2011	Fluoride	0.81		mg F/L	P385525	
2187315	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P385484	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37	I	mg N/L	P385668	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P385577	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P385518	
	SM 5310 B-2011	Organic Carbon	3.6		mg C/L	P385543	
2187317	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	UQ	mg P/L	P385398	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: The sample expired prior to receipt.

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample expired prior to receipt.

Sample Location: Hogtown Bayou at Cessna Park

Collection Date/Time: 07/28/2020 12:20

Field ID: G3NW0152

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2187314	EPA 180.1 Rev. 2.0	Turbidity	4.9	AQ	NTU	P385422	
	EPA 300.0 Rev. 2.1	Bromide	34		mg Br/L	P386265	
	SM 2320 B-2011	Total Alkalinity	73		mg CaCO3/L	P385565	
	SM 2540 D-2011	TSS	6	I	mg/L	P385704	
	SM 4500 F-C-2011	Fluoride	0.67		mg F/L	P385525	
2187316	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P385484	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.52		mg N/L	P385668	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P385577	
	EPA 365.1 Rev. 2.0	Total-P	0.032		mg P/L	P385518	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P385543	
2187318	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	UQ	mg P/L	P385398	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: The sample expired upon receipt.

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample expired upon receipt.

Sample Location: Boggy Bayou Mouth

Collection Date/Time: 07/28/2020 15:00

Field ID: G3NW0186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2187319	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P385422	
	EPA 300.0 Rev. 2.1	Bromide	28		mg Br/L	P386265	
	SM 2320 B-2011	Total Alkalinity	59		mg CaCO3/L	P385565	
	SM 2540 D-2011	TSS	3	U	mg/L	P385704	
	SM 4500 F-C-2011	Fluoride	0.53		mg F/L	P385525	
2187320	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P385484	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	I	mg N/L	P385668	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P385577	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P385518	
	SM 5310 B-2011	Organic Carbon	3.4		mg C/L	P385543	
2187321	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P385398	

Ref. Method and Comment:

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

Non-Conformance Report

NCR ID: 8365

Event(s)

Job(s)

Sample(s)

Test(s)

NW-DIST-2020-07-30-01

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived one day late by FedEx, samples received within the acceptable temperature range.

Resolution: Samples will be qualified as appropriate.
Customer, M. King, was contacted by phone.
Biology and Chemistry supervisors were notified by email.

Authorized by/Date: Joshua Ayres 8/3/2020

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385422

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385423

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386265

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385484

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385668

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385577

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385518

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385398

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

Reference Method: SM 2320 B-2011
Batch ID: P385565

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P385704

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P385525

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P385543

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386265

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385484

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385668

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385518

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385398

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.3		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P385565

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P385525

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P385543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187681	Bromide	97.9	94.0	P/P	90 - 110
2187682	Bromide	95.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187320	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187576	Kjeldahl Nitrogen	108	108	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2186972	NO2NO3-N	98.4	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2186971	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187321	O-Phosphate-P	99.6	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P385525

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187319	Fluoride	101	101	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P385543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187320	Organic Carbon	97.2	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187314	Turbidity	1.62	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187207	Turbidity	2.60	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187681	Bromide	2.42	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187320	Ammonia-N	1.18	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187576	Kjeldahl Nitrogen	0.351	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2186972	NO2NO3-N	0.908	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2186971	Total-P	1.24	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187321	O-Phosphate-P	0.999	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P385565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187682	Total Alkalinity	2.80	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
Batch ID: P385525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187319	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P385543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187320	Organic Carbon	2.93	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: A100188

Included Lab Sample IDs: 2187317, 2187318, 2187321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	98.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100196

Included Lab Sample IDs: 2187313, 2187314, 2187319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100213

Included Lab Sample IDs: 2187315, 2187316, 2187320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	98.8	P/P	90 - 110
Ammonia-N	99.6	98.6	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A100227

Included Lab Sample IDs: 2187313, 2187314, 2187319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100232

Included Lab Sample IDs: 2187315, 2187316, 2187320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	102	P/P	90 - 110
Organic Carbon	103	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A100241

Included Lab Sample IDs: 2187313, 2187314, 2187319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	103	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100247

Included Lab Sample IDs: 2187315, 2187316, 2187320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO ₂ NO ₃ -N	102	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100324

Included Lab Sample IDs: 2187315, 2187316, 2187320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.4	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A100360

Included Lab Sample IDs: 2187315, 2187316, 2187320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	97.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100541

Included Lab Sample IDs: 2187313, 2187314, 2187319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	98.0	99.4	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					1.62	
	Turbidity					2.60	
EPA 300.0 Rev. 2.1	Bromide	102	97.9	94.0	95.9		2.42
EPA 350.1 Rev. 2.0	Ammonia-N	99.6	101	102			1.18
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	108	108			0.351
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	98.4	97.4			0.908
EPA 365.1 Rev. 2.0	Total-P	102	105	103			1.24
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	99.6	101			0.999
SM 2320 B-2011	Total Alkalinity	104				2.80	
SM 4500 F-C-2011	Fluoride	99.8	101	101			0.0
SM 5310 B-2011	Organic Carbon	102	97.2	100			2.93

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2187313, 2187314, 2187319
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2187313, 2187314, 2187319
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2187315, 2187316, 2187320
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2187315, 2187316, 2187320
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2187315, 2187316, 2187320
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2187315, 2187316, 2187320
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2187317, 2187318, 2187321
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2187313, 2187314, 2187319
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2187313, 2187314, 2187319
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2187313, 2187314, 2187319
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2187315, 2187316, 2187320

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	07/30/2020			07/30/2020 12:23	Blanca Fach	2187314
	07/30/2020			07/30/2020 12:36	Blanca Fach	2187319
	07/30/2020			07/30/2020 15:42	Blanca Fach	2187313
EPA 300.0 Rev. 2.1	07/30/2020			08/15/2020 05:33	Julia Storbeck	2187313
	07/30/2020			08/15/2020 05:50	Julia Storbeck	2187314
	07/30/2020			08/15/2020 06:07	Julia Storbeck	2187319
EPA 350.1 Rev. 2.0	07/30/2020			08/02/2020 13:11	Ping Hua	2187320
	07/30/2020			08/02/2020 13:16	Ping Hua	2187315
	07/30/2020			08/02/2020 13:24	Ping Hua	2187316
EPA 351.2 Rev. 2.0	07/30/2020	08/05/2020 10:42	Sima Feizi	08/06/2020 16:29	Jhamieka S. Greenwood	2187315
	07/30/2020	08/05/2020 10:42	Sima Feizi	08/06/2020 16:30	Jhamieka S. Greenwood	2187316
	07/30/2020	08/05/2020 10:42	Sima Feizi	08/06/2020 16:32	Jhamieka S. Greenwood	2187320
EPA 353.2 Rev. 2.0	07/30/2020			08/04/2020 08:27	Beverly Y. Sanders	2187315
	07/30/2020			08/04/2020 08:28	Beverly Y. Sanders	2187316
	07/30/2020			08/04/2020 08:29	Beverly Y. Sanders	2187320
EPA 365.1 Rev. 2.0	07/30/2020	08/03/2020 10:00	Lipi Saha	08/06/2020 15:38	Benjamin T. Nordmann	2187315
	07/30/2020	08/03/2020 10:00	Lipi Saha	08/06/2020 15:39	Benjamin T. Nordmann	2187316, 2187320
EPA 365.1 Rev. 2.0 dissolved	07/30/2020			07/30/2020 14:54	Jhamieka S. Greenwood	2187321
	07/30/2020			07/30/2020 15:00	Jhamieka S. Greenwood	2187317, 2187318
SM 2320 B-2011	07/30/2020			08/04/2020 05:25	Dale L. Simmons	2187313
	07/30/2020			08/04/2020 05:34	Dale L. Simmons	2187314
	07/30/2020			08/04/2020 05:44	Dale L. Simmons	2187319
SM 2540 D-2011	07/30/2020			07/31/2020 17:30	Madeline Gruver	2187313, 2187314, 2187319
SM 4500 F-C-2011	07/30/2020			07/31/2020 22:05	Dale L. Simmons	2187319
	07/30/2020			07/31/2020 22:29	Dale L. Simmons	2187313
	07/30/2020			07/31/2020 22:34	Dale L. Simmons	2187314
SM 5310 B-2011	07/30/2020			08/01/2020 02:28	David Boose	2187320
	07/30/2020			08/01/2020 03:29	David Boose	2187315
	07/30/2020			08/01/2020 03:41	David Boose	2187316