

Chemical Analysis Report

SW-DIST-2021-01-20-01

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

Event Description: **Run 16 Pinellas North**
Request ID: **RQ-2021-01-18-13**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

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: 10-FEB-2021 10:30



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: Nutrients and Pesticides.

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: PP Ditch 1

Collection Date/Time: 01/19/2021 11:30

Field ID: G5SW0134

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2220053	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P392686	
	EPA 300.0 Rev. 2.1	Bromide	2.4		mg Br/L	P393037	
		Sulfate	120		mg SO4/L	P392737	
	SM 2320 B-2011	Total Alkalinity	218		mg CaCO3/L	P392852	
	SM 2540 D-2011	TSS	3	I	mg/L	P392980	
	SM 4500 F-C-2011	Fluoride	0.33		mg F/L	P392857	
2220055	EPA 350.1 Rev. 2.0	Ammonia-N	0.094		mg N/L	P393333	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.79		mg N/L	P393094	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P392743	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P392722	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P392755	
2220057	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.021		mg P/L	P392635	
2220072	EPA 8276	Chlordane	5.1	U	ng/L	P392729	
		Toxaphene	30	U	ng/L	P392729	

Ref. Method and Comment:

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

Sample Location: St Joe Tidal By Westchester Blvd

Collection Date/Time: 01/19/2021 12:10

Field ID: G5SW0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2220054	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P392686	
	EPA 300.0 Rev. 2.1	Bromide	1.3		mg Br/L	P393037	
		Sulfate	85		mg SO4/L	P392737	
	SM 2320 B-2011	Total Alkalinity	151		mg CaCO3/L	P392852	
	SM 2540 D-2011	TSS	3	I	mg/L	P392980	
	SM 4500 F-C-2011	Fluoride	0.33		mg F/L	P392857	
2220056	EPA 350.1 Rev. 2.0	Ammonia-N	0.091		mg N/L	P393333	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.69		mg N/L	P393094	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P392743	
	EPA 365.1 Rev. 2.0	Total-P	0.28		mg P/L	P392722	
	SM 5310 B-2011	Organic Carbon	8.9		mg C/L	P392755	
2220058	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P392635	

Ref. Method and Comment:

SM 2540 D-2011: 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: P392686

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393037

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392743

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392722

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

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

Reference Method: EPA 8276
Batch ID: P392729

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P392852

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

Reference Method: SM 2540 D-2011
Batch ID: P392980

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P392857

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P392755

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: P392737

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393037

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392743

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392722

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

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

Reference Method: EPA 8276
Batch ID: P392729

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	87.5	91.7	P/P	56 - 117
Toxaphene	105	106	P/P	45 - 116

Reference Method: SM 2320 B-2011
Batch ID: P392852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.3		P	93 - 104

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P392857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.3		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P392755

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219991	Sulfate	104		P	90 - 110
2220176	Sulfate	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219957	Bromide	90.3		P	90 - 110
2220312	Bromide	97.8	97.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219973	Ammonia-N	101	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220056	Kjeldahl Nitrogen	98.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220014	NO2NO3-N	93.8	93.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392722

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2219993	Total-P	104	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220163	O-Phosphate-P	99.5	99.5	P/P	90 - 110

Reference Method: EPA 8276
Batch ID: P392729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220618	Chlordane	86.0	77.3	P/P	47 - 128
2220618	Toxaphene	153	151	P/P	11 - 163

Reference Method: SM 4500 F-C-2011
Batch ID: P392857

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220159	Fluoride	95.8	95.8	P/P	94 - 107

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P392755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220106	Organic Carbon	98.9	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P392686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220013	Turbidity	4.98	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220176	Sulfate	1.17	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220312	Bromide	0.421	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2219973	Ammonia-N	3.17	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393094

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220056	Kjeldahl Nitrogen	1.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P392743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220014	NO2NO3-N	0.477	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P392722

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2219993	Total-P	2.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P392635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220163	O-Phosphate-P	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8276
 Batch ID: P392729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220618	Chlordane	10.7	Spike	P	0 - 30
2220618	Toxaphene	1.16	Spike	P	0 - 30
LFB	Chlordane	4.68	LCS	P	0 - 30
LFB	Toxaphene	1.30	LCS	P	0 - 30

Reference Method: SM 2320 B-2011
 Batch ID: P392852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220159	Total Alkalinity	1.59	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
 Batch ID: P392857

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220159	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P392755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220106	Organic Carbon	1.50	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2220072
Field Sample ID: G5SW0134

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	48.3	P	29 - 92.0
EPA 8276	PCNB	83.3	P	43 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A103142

Included Lab Sample IDs: 2220057, 2220058

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.8	100	P/P	90 - 110
O-Phosphate-P	99.9	99.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103154

Included Lab Sample IDs: 2220053, 2220054

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A103158

Included Lab Sample IDs: 2220053, 2220054

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	102	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103180

Included Lab Sample IDs: 2220055, 2220056

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

Reference Method: SM 5310 B-2011

Run ID: A103188

Included Lab Sample IDs: 2220055, 2220056

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103214

Included Lab Sample IDs: 2220055, 2220056

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

Reference Method: SM 2320 B-2011

Run ID: A103220

Included Lab Sample IDs: 2220053, 2220054

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	91.9	94.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A103220

Included Lab Sample IDs: 2220053, 2220054

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103266

Included Lab Sample IDs: 2220053, 2220054

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	96.0	96.5	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A103305

Included Lab Sample IDs: 2220072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.2		P	80 - 120
Toxaphene	112		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103322

Included Lab Sample IDs: 2220055, 2220056

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	98.9	P/P	90 - 110
Kjeldahl Nitrogen	98.9	96.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103396

Included Lab Sample IDs: 2220055, 2220056

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	94.7	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						4.98	
EPA 300.0 Rev. 2.1	Bromide	99.0		97.8	97.3	90.3		0.421
	Sulfate	104		107	104		1.17	
EPA 350.1 Rev. 2.0	Ammonia-N	103		101	104			3.17
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.3		98.2	100			1.33
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101		93.8	93.3			0.477
EPA 365.1 Rev. 2.0	Total-P	103		104	107			2.31
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4		99.5	99.5			0.0
EPA 8276	Chlordane	87.5	91.7	86.0	77.3	4.68		10.7
	Toxaphene	105	106	153	151	1.30		1.16
SM 2320 B-2011	Total Alkalinity	95.3					1.59	
SM 4500 F-C-2011	Fluoride	95.3		95.8	95.8			0.0
SM 5310 B-2011	Organic Carbon	101		98.9	102			1.50

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2220053, 2220054
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2220053, 2220054
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2220053, 2220054
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2220055, 2220056
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2220055, 2220056
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2220055, 2220056
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2220055, 2220056
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2220057, 2220058
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2220072
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2220053, 2220054
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2220053, 2220054
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2220053, 2220054
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2220055, 2220056

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	01/20/2021			01/20/2021 16:14	Yen Ta	2220053, 2220054
EPA 300.0 Rev. 2.1	01/20/2021			01/22/2021 01:08	Lipi Saha	2220053
	01/20/2021			01/22/2021 01:21	Lipi Saha	2220054
	01/20/2021			01/27/2021 17:37	Lipi Saha	2220053
	01/20/2021			01/27/2021 17:56	Lipi Saha	2220054
EPA 350.1 Rev. 2.0	01/20/2021			02/03/2021 16:42	Ping Hua	2220055
	01/20/2021			02/03/2021 16:44	Ping Hua	2220056
EPA 351.2 Rev. 2.0	01/20/2021	01/28/2021 17:00	Yen Ta	01/29/2021 15:38	Julia Storbeck	2220056
	01/20/2021	01/28/2021 17:00	Yen Ta	01/29/2021 15:46	Julia Storbeck	2220055
EPA 353.2 Rev. 2.0	01/20/2021			01/22/2021 10:47	Beverly Y. Sanders	2220055
	01/20/2021			01/22/2021 10:49	Beverly Y. Sanders	2220056
EPA 365.1 Rev. 2.0	01/20/2021	01/21/2021 17:45	Madeline Gruver	01/25/2021 14:25	Lipi Saha	2220055
	01/20/2021	01/21/2021 17:45	Madeline Gruver	01/25/2021 14:26	Lipi Saha	2220056
EPA 365.1 Rev. 2.0 dissolved	01/20/2021			01/20/2021 14:50	Blanca Fach	2220057
	01/20/2021			01/20/2021 15:15	Blanca Fach	2220058
EPA 8276	01/20/2021	01/25/2021 08:30	Rasheda Ghaffari	01/29/2021 01:53	Michael Poppell	2220072
SM 2320 B-2011	01/20/2021			01/22/2021 01:36	Dale L. Simmons	2220054
	01/20/2021			01/22/2021 01:49	Dale L. Simmons	2220053
SM 2540 D-2011	01/20/2021			01/22/2021 15:16	Yijie Li	2220053, 2220054
SM 4500 F-C-2011	01/20/2021			01/22/2021 01:36	Dale L. Simmons	2220054
	01/20/2021			01/22/2021 01:49	Dale L. Simmons	2220053
SM 5310 B-2011	01/20/2021			01/22/2021 02:34	Touraj Touran	2220055
	01/20/2021			01/22/2021 02:46	Touraj Touran	2220056