Chemical Analysis Report

SO-DIST-2019-06-04-02

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

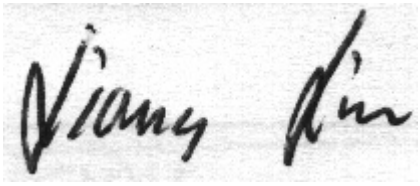
Event Description: **OKEE Canals**
Request ID: **RQ-2019-06-03-59**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Gary Snorek

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: Liang Lin, Environmental Administrator

Date Certified: 18-JUN-2019 15:50



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: Harney Pond Canal@SR 70 **Collection Date/Time: 06/03/2019 10:05**

Field ID: G4SD0173 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2091088	EPA 180.1 Rev. 2.0	Turbidity	11	A	NTU	P365010	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P365310	
		Sulfate	24		mg SO4/L	P365313	
	SM 2120 B	Color (true)	57		PCU	P365015	
	SM 2320 B-97	Total Alkalinity	28		mg CaCO3/L	P365483	
	SM 2540 C-97	TDS	102		mg/L	P365621	
	SM 2540 D-97	TSS	18	I	mg/L	P365626	
	SM 4500 F-C-97	Fluoride	0.079	I	mg F/L	P365484	
2091091	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P365351	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P365272	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P365199	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P365233	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P365296	
2091094	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P365002	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

Sample Location: Prairie Canal @ SR 70 **Collection Date/Time: 06/03/2019 10:25**

Field ID: G4SD0174 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2091089	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P365010	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P365310	
		Sulfate	22		mg SO4/L	P365313	
	SM 2120 B	Color (true)	49		PCU	P365015	
	SM 2320 B-97	Total Alkalinity	27		mg CaCO3/L	P365483	
	SM 2540 C-97	TDS	121		mg/L	P365621	
	SM 2540 D-97	TSS	8	I	mg/L	P365626	
	SM 4500 F-C-97	Fluoride	0.079	I	mg F/L	P365484	
2091092	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P365351	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P365272	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P365199	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P365233	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P365296	
2091095	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P365002	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: C-41 A @ SR 70 **Collection Date/Time: 06/03/2019 10:50**

Field ID: G4SD0175 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2091090	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P365010	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P365310	
		Sulfate	23		mg SO4/L	P365313	
	SM 2120 B	Color (true)	41		PCU	P365015	
	SM 2320 B-97	Total Alkalinity	31		mg CaCO3/L	P365483	
	SM 2540 C-97	TDS	128		mg/L	P365621	
	SM 2540 D-97	TSS	11	I	mg/L	P365626	
	SM 4500 F-C-97	Fluoride	0.079	I	mg F/L	P365484	
2091093	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P365351	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P365272	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P365199	
	EPA 365.1 Rev. 2.0	Total-P	0.040		mg P/L	P365233	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P365296	
2091096	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P365002	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P365010

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365310

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365313

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P365351

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365272

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365199

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365233

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P365002

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

Reference Method: SM 2120 B
Batch ID: P365015

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P365483

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

Reference Method: SM 2540 C-97
Batch ID: P365621

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P365626

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P365484

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P365296

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: P365310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365313

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P365351

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365272

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365199

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365233

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P365002

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

Reference Method: SM 2120 B
Batch ID: P365015

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	104		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P365483

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P365484

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P365296

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.9		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091040	Chloride	99.3		P	90 - 110
2091106	Chloride	94.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365313

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091040	Sulfate	99.0		P	90 - 110
2091106	Sulfate	95.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P365351

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091123	Ammonia-N	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365272

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091041	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091068	NO2NO3-N	97.0	95.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365233

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091041	Total-P	101	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P365002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091070	O-Phosphate-P	99.2	99.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P365484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2091382	Fluoride	104	104	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P365296

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2090947	Organic Carbon	93.6	93.3	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P365010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091088	Turbidity	0.930	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091040	Chloride	0.124	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365313

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091040	Sulfate	0.480	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P365351

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091123	Ammonia-N	0.247	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091041	Kjeldahl Nitrogen	1.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091068	NO2NO3-N	1.14	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365233

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091041	Total-P	0.830	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P365002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091070	O-Phosphate-P	0.503	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B
Batch ID: P365015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091112	Color (true)	0.804	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P365483

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091382	Total Alkalinity	0.0345	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P365621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091112	TDS	2.58	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P365484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2091382	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P365296

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2090947	Organic Carbon	0.239	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A91848
Included Lab Sample IDs: 2091094, 2091095, 2091096

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	98.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A91849
Included Lab Sample IDs: 2091088, 2091089, 2091090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A91850
Included Lab Sample IDs: 2091088, 2091089, 2091090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	103	P/P	90 - 115

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A91854
Included Lab Sample IDs: 2091088, 2091089, 2091090

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A91913
Included Lab Sample IDs: 2091091, 2091092, 2091093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.0	90.5	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A91953
Included Lab Sample IDs: 2091091, 2091092, 2091093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A91980
Included Lab Sample IDs: 2091091, 2091092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.6	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A91986
Included Lab Sample IDs: 2091091, 2091092, 2091093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	104	105	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A91989
Included Lab Sample IDs: 2091093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A92001
Included Lab Sample IDs: 2091091, 2091092, 2091093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.4	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A92039
Included Lab Sample IDs: 2091088, 2091089, 2091090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A92039
Included Lab Sample IDs: 2091088, 2091089, 2091090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	98.5	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		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					0.930	
EPA 300.0 Rev. 2.1	Chloride	98.9	99.3	94.8		0.124	
	Sulfate	97.5	99.0	95.4		0.480	
EPA 350.1 Rev. 2.0	Ammonia-N	98.9	103	104			0.247
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	106	107			1.10
EPA 353.2 Rev. 2.0	NO2NO3-N	96.0	97.0	95.6			1.14
EPA 365.1 Rev. 2.0	Total-P	100	101	99.8			0.830
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.4	99.2	99.7			0.503
SM 2120 B	Color (true)	104				0.804	
SM 2320 B-97	Total Alkalinity	103				0.0345	
SM 2540 C-97	TDS					2.58	
SM 4500 F-C-97	Fluoride	97.1	104	104			0.0
SM 5310 B-00	Organic Carbon	96.9	93.6	93.3			0.239

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2091088, 2091089, 2091090
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2091088, 2091089, 2091090
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2091088, 2091089, 2091090
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2091091, 2091092, 2091093
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2091091, 2091092, 2091093
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2091091, 2091092, 2091093
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2091091, 2091092, 2091093
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2091094, 2091095, 2091096
SM 2120 B / E31780	True Color measured at 450 nm	2091088, 2091089, 2091090
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2091088, 2091089, 2091090
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2091088, 2091089, 2091090
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2091088, 2091089, 2091090
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2091088, 2091089, 2091090
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2091091, 2091092, 2091093

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	06/04/2019			06/04/2019 17:24	Julia Storbeck	2091088, 2091089, 2091090
EPA 300.0 Rev. 2.1	06/04/2019			06/06/2019 22:23	Lipi Saha	2091088
	06/04/2019			06/06/2019 22:35	Lipi Saha	2091089
	06/04/2019			06/06/2019 22:47	Lipi Saha	2091090
EPA 350.1 Rev. 2.0	06/04/2019			06/06/2019 13:43	Ping Hua	2091091
	06/04/2019			06/06/2019 13:45	Ping Hua	2091092
	06/04/2019			06/06/2019 13:46	Ping Hua	2091093
EPA 351.2 Rev. 2.0	06/04/2019	06/07/2019 12:45	Adrian Shelby	06/10/2019 18:10	Virginia P. Brown	2091091
	06/04/2019	06/07/2019 12:45	Adrian Shelby	06/10/2019 18:11	Virginia P. Brown	2091092
	06/04/2019	06/07/2019 12:45	Adrian Shelby	06/10/2019 18:13	Virginia P. Brown	2091093
EPA 353.2 Rev. 2.0	06/04/2019			06/06/2019 11:06	Beverly Y. Sanders	2091091
	06/04/2019			06/06/2019 11:07	Beverly Y. Sanders	2091092
	06/04/2019			06/06/2019 11:08	Beverly Y. Sanders	2091093
EPA 365.1 Rev. 2.0	06/04/2019	06/07/2019 11:40	Sima Feizi	06/10/2019 11:26	Julia Storbeck	2091091
	06/04/2019	06/07/2019 11:40	Sima Feizi	06/10/2019 11:27	Julia Storbeck	2091092
	06/04/2019	06/07/2019 11:40	Sima Feizi	06/10/2019 14:50	Julia Storbeck	2091093
EPA 365.1 Rev. 2.0 dissolved	06/04/2019			06/04/2019 15:55	Jhamieka S. Greenwood	2091096
	06/04/2019			06/04/2019 15:56	Jhamieka S. Greenwood	2091095
	06/04/2019			06/04/2019 15:57	Jhamieka S. Greenwood	2091094
SM 2120 B	06/04/2019			06/04/2019 17:58	Madeline Funaro	2091088
	06/04/2019			06/04/2019 17:59	Madeline Funaro	2091089
	06/04/2019			06/04/2019 18:00	Madeline Funaro	2091090
SM 2320 B-97	06/04/2019			06/11/2019 20:31	Dale L. Simmons	2091088
	06/04/2019			06/11/2019 20:43	Dale L. Simmons	2091089
	06/04/2019			06/11/2019 20:54	Dale L. Simmons	2091090
SM 2540 C-97	06/04/2019			06/06/2019 15:49	Yijie Li	2091088, 2091089, 2091090
SM 2540 D-97	06/04/2019			06/06/2019 15:49	Yijie Li	2091088, 2091089, 2091090
SM 4500 F-C-97	06/04/2019			06/11/2019 20:31	Dale L. Simmons	2091088
	06/04/2019			06/11/2019 20:43	Dale L. Simmons	2091089
	06/04/2019			06/11/2019 20:54	Dale L. Simmons	2091090
SM 5310 B-00	06/04/2019			06/07/2019 09:07	Julia Storbeck	2091091
	06/04/2019			06/07/2019 09:20	Julia Storbeck	2091092
	06/04/2019			06/07/2019 09:34	Julia Storbeck	2091093