Chemical Analysis Report

NE-DIST-2016-05-19-01

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

Event Description: **HAWTHORNE LAKES**
Request ID: **RQ-2016-05-02-39**
Customer: **NE-DIST**
Project ID: **SMP**

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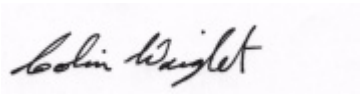
Certified by: Colin Wright, Environmental Administrator

Date Certified: 14-JUN-2016 12:15



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 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: 21020012 LK JEFF END OLD MILL **Collection Date/Time: 05/18/2016 11:50**

Field ID: 21020012 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1800570	EPA 180.1 Rev. 2.0	Turbidity	5.0		NTU	P304677	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P305175	
		Sulfate	0.59		mg SO4/L	P305176	
	SM 2120 B	Color (true)	81		PCU	P304643	
	SM 2320 B-97	Total Alkalinity	3.4		mg CaCO3/L	P304957	
	SM 2540 C-97	TDS	61		mg/L	P305599	
	SM 2540 D-97	TSS	24		mg/L	P305033	
	SM 4500 F-C-97	Fluoride	0.048	I	mg F/L	P304959	
1800572	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P305260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.79		mg N/L	P305222	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304808	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P305431	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P305288	
1800574	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P304632	

Ref. Method and Comment:
SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: 21010018 FALLING CR ABV FALLS **Collection Date/Time: 05/18/2016 12:45**

Field ID: 21010018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1800571	EPA 180.1 Rev. 2.0	Turbidity	2.2	A	NTU	P304678	
	EPA 300.0 Rev. 2.1	Chloride	10		mg Cl/L	P305175	
		Sulfate	0.71		mg SO4/L	P305176	
	SM 2120 B	Color (true)	510		PCU	P304643	
	SM 2320 B-97	Total Alkalinity	4.3		mg CaCO3/L	P304957	
	SM 2540 C-97	TDS	79		mg/L	P305599	
	SM 2540 D-97	TSS	2	I	mg/L	P305033	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P304959	
1800573	EPA 350.1 Rev. 2.0	Ammonia-N	0.035		mg N/L	P305260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.99		mg N/L	P305224	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.053		mg N/L	P304808	
	EPA 365.1 Rev. 2.0	Total-P	0.39		mg P/L	P305431	
	SM 5310 B-00	Organic Carbon	39		mg C/L	P305288	
1800575	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.29		mg P/L	P304632	

Ref. Method and Comment:
SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P304677

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P304678

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305175

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305176

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305260

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305222

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305224

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304808

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305431

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304632

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B
Batch ID: P304643

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P304957

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

Reference Method: SM 2540 C-97
Batch ID: P305599

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P305033

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P304959

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P305288

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: P305175

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305176

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305260

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305222

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.6		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304808

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305431

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304632

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

Reference Method: SM 2320 B-97
Batch ID: P304957

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P304959

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P305288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305175

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800451	Chloride	96.5	97.4	P/P	90 - 110
1800628	Chloride	98.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305176

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800451	Sulfate	96.9	98.2	P/P	90 - 110
1800628	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800632	Ammonia-N	99.4	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800541	Kjeldahl Nitrogen	108	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800631	Kjeldahl Nitrogen	106	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800546	NO2NO3-N	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800548	Total-P	102	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304632

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800421	O-Phosphate-P	96.9	98.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P304959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800300	Fluoride	98.8	98.2	P/P	91 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P305288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1800581	Organic Carbon	97.4	99.1	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P304677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800519	Turbidity	0.766	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P304678

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800571	Turbidity	2.78	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305175

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800451	Chloride	0.588	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P305176

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800451	Sulfate	1.26	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P305260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800632	Ammonia-N	0.204	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800541	Kjeldahl Nitrogen	2.48	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P305224

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800631	Kjeldahl Nitrogen	4.61	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304808

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800546	NO2NO3-N	1.93	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P305431

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800548	Total-P	2.57	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304632

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800421	O-Phosphate-P	1.13	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P304643

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800527	Color (true)	1.73	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304957

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800300	Total Alkalinity	0.0676	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P305599

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800627	TDS	0.791	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P304959

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800300	Fluoride	0.483	Spike	P	0 - 3.0

Quality Assurance Report
Precision

Reference Method: SM 5310 B-00
Batch ID: P305288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1800581	Organic Carbon	0.990	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: A69583
Included Lab Sample IDs: 1800574, 1800575

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.1	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A69585
Included Lab Sample IDs: 1800570, 1800571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 115
Color (true)	98.8	100	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A69592
Included Lab Sample IDs: 1800570, 1800571

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A69629
Included Lab Sample IDs: 1800572, 1800573

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	100	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A69675
Included Lab Sample IDs: 1800570, 1800571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.6	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A69675
Included Lab Sample IDs: 1800570, 1800571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500 F-C-97
Run ID: A69675
Included Lab Sample IDs: 1800570, 1800571

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A69676
Included Lab Sample IDs: 1800570, 1800571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	101	P/P	90 - 110
Sulfate	99.8	97.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69751
Included Lab Sample IDs: 1800572, 1800573

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	99.9	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A69765
Included Lab Sample IDs: 1800572, 1800573

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A69796
Included Lab Sample IDs: 1800572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A69797
Included Lab Sample IDs: 1800573

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.2	96.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A69840
Included Lab Sample IDs: 1800573

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.9	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A69851
Included Lab Sample IDs: 1800572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	99.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

* 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						0.766	
	Turbidity						2.78	
EPA 300.0 Rev. 2.1	Chloride	99.6	96.5	97.4	98.8			0.588
	Sulfate	98.6	96.9	98.2	98.3			1.26
EPA 350.1 Rev. 2.0	Ammonia-N	100	99.4	99.2				0.204
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	108	104				2.48
	Kjeldahl Nitrogen	96.6	106	98.8				4.61
EPA 353.2 Rev. 2.0	NO2NO3-N	103	102	104				1.93
EPA 365.1 Rev. 2.0	Total-P	101	102	105				2.57
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5	96.9	98.0				1.13
SM 2120 B	Color (true)						1.73	
SM 2320 B-97	Total Alkalinity	101					0.0676	
SM 2540 C-97	TDS						0.791	
SM 4500 F-C-97	Fluoride	98.5	98.8	98.2				0.483
SM 5310 B-00	Organic Carbon	99.8	97.4	99.1				0.990

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1800570, 1800571
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1800570, 1800571
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1800570, 1800571
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1800572, 1800573
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1800572, 1800573
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1800572, 1800573
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1800572, 1800573
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1800574, 1800575
SM 2120 B / E31780	True Color measured at 450 nm	1800570, 1800571
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1800570, 1800571
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1800570, 1800571
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1800570, 1800571
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1800570, 1800571
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1800572, 1800573

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	05/19/2016			05/19/2016 16:13	Sima Feizi	1800570, 1800571
EPA 300.0 Rev. 2.1	05/19/2016			05/26/2016	Ping Hua	1800570, 1800571
EPA 350.1 Rev. 2.0	05/19/2016			05/27/2016	Diana M. Turner	1800572, 1800573
EPA 351.2 Rev. 2.0	05/19/2016	05/31/2016	Sofia Elnemr	06/01/2016	Christopher Armour	1800572
	05/19/2016	05/31/2016	Sofia Elnemr	06/02/2016	Christopher Armour	1800573
EPA 353.2 Rev. 2.0	05/19/2016			05/23/2016	Peter D. Kaus	1800572, 1800573
EPA 365.1 Rev. 2.0	05/19/2016	06/02/2016	Vijayalakshmi Reddy	06/02/2016	Rochelle Y Jackson	1800573
	05/19/2016	06/02/2016	Vijayalakshmi Reddy	06/03/2016	Rochelle Y Jackson	1800572
EPA 365.1 Rev. 2.0 dissolved	05/19/2016			05/19/2016 14:48	Ping Hua	1800574
	05/19/2016			05/19/2016 14:49	Ping Hua	1800575
SM 2120 B	05/19/2016			05/19/2016 16:29	Chrisoulla Rakowski	1800570
	05/19/2016			05/19/2016 16:42	Chrisoulla Rakowski	1800571
SM 2320 B-97	05/19/2016			05/25/2016	Dale L. Simmons	1800570, 1800571
SM 2540 C-97	05/19/2016			05/23/2016	Sima Feizi	1800570, 1800571
SM 2540 D-97	05/19/2016			05/23/2016	Sima Feizi	1800570, 1800571
SM 4500 F-C-97	05/19/2016			05/25/2016	Dale L. Simmons	1800570, 1800571
SM 5310 B-00	05/19/2016			05/27/2016	Diana M. Turner	1800572, 1800573