

Chemical Analysis Report

NW-DIST-2016-03-24-01

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

Event Description: **WBID 24AA 260 10G 11A 635**

Request ID: **RQ-2016-03-21-30**

Customer: **NW-DIST**

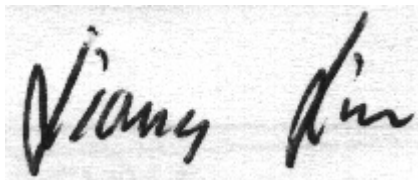
Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 12-APR-2016 14:35

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

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: WHITEOAK BAYOU BELOW CR 191

Collection Date/Time: 03/23/2016 13:35

Field ID: G4NW0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1783037	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P301011	
	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P301105	
		Sulfate	1.4		mg SO4/L	P301107	
	SM 2120 B	Color (true)	50	A	PCU	P300993	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P301442	
	SM 2540 C-97	TDS	18	I	mg/L	P301560	
	SM 2540 D-97	TSS	2	I	mg/L	P301505	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301445	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P301365	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26		mg N/L	P301513	
1783039	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P301122	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P301324	
	SM 5310 B-00	Organic Carbon	6.3		mg C/L	P301375	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P300988	
	dissolved						

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: LOCKLAND LAKE CR @ SR87

Collection Date/Time: 03/23/2016 15:55

Field ID: G4NW0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1783038	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P301011	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P301105	
		Sulfate	1.7		mg SO4/L	P301107	
	SM 2120 B	Color (true)	18		PCU	P300993	
	SM 2320 B-97	Total Alkalinity	11		mg CaCO3/L	P301442	
	SM 2540 C-97	TDS	35		mg/L	P301561	
	SM 2540 D-97	TSS	2	U	mg/L	P301506	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301445	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P301365	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	I	mg N/L	P301511	
1783040	EPA 353.2 Rev. 2.0	NO2NO3-N	0.47		mg N/L	P301122	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P301324	
	SM 5310 B-00	Organic Carbon	1.5		mg C/L	P301375	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P300988	
	dissolved						

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: P301011

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301105

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301107

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301365

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301511

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301513

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301122

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P301324

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P300988

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

Reference Method: SM 2120 B
Batch ID: P300993

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P301442

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

Reference Method: SM 2540 C-97
Batch ID: P301560

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P301561

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P301505

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P301506

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P301445

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P301375

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: P301105

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301107

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301107

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301365

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301511

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: P301513

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301122

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P301324

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P300988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.2		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P301442

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P301445

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.3		P	94 - 108

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P301375

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1783102	Chloride	102	102	P/P	90 - 110
1783108	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1783102	Sulfate	97.4	97.6	P/P	90 - 110
1783108	Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301365

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782956	Ammonia-N	96.4	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301511

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1783040	Kjeldahl Nitrogen	101	109	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301513

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782954	Kjeldahl Nitrogen	97.7	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301122

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1783039	NO2NO3-N	98.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P301324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782955	Total-P	98.8	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P300988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1783041	O-Phosphate-P	97.0	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Batch ID: P301445

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782925	Fluoride	97.4	97.4	P/P	94 - 107

Reference Method: SM 5310 B-00
 Batch ID: P301375

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782953	Organic Carbon	92.2	92.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P301011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782823	Turbidity	0.454	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P301105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783102	Chloride	0.147	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P301107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783102	Sulfate	0.211	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P301365

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782956	Ammonia-N	1.00	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P301511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783040	Kjeldahl Nitrogen	6.98	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782954	Kjeldahl Nitrogen	3.68	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301122

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783039	NO2NO3-N	0.509	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P301324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782955	Total-P	1.91	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P300988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783041	O-Phosphate-P	3.44	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P300993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783037	Color (true)	1.87	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P301442

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782925	Total Alkalinity	0.224	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P301560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782935	TDS	1.12	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P301561

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1783049	TDS	1.93	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P301445

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782925	Fluoride	0.0	Spike	P	0 - 3.7

Reference Method: SM 5310 B-00
Batch ID: P301375

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782953	Organic Carbon	0.316	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 300.0 Rev. 2.1
Run ID: A68401
Included Lab Sample IDs: 1783037, 1783038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	98.3	P/P	90 - 110
Sulfate	102	95.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A68425
Included Lab Sample IDs: 1783041, 1783042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.9	97.7	P/P	90 - 110
O-Phosphate-P	99.0	96.4	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A68426
Included Lab Sample IDs: 1783037, 1783038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.4	97.0	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A68427
Included Lab Sample IDs: 1783037, 1783038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A68471
Included Lab Sample IDs: 1783039, 1783040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A68471

Included Lab Sample IDs: 1783039, 1783040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A68562

Included Lab Sample IDs: 1783039, 1783040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	99.6	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A68565

Included Lab Sample IDs: 1783039, 1783040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	92.8	92.5	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A68600

Included Lab Sample IDs: 1783037, 1783038

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

Reference Method: SM 4500 F-C-97

Run ID: A68600

Included Lab Sample IDs: 1783037, 1783038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A68618

Included Lab Sample IDs: 1783039, 1783040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A68663

Included Lab Sample IDs: 1783039

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A68715

Included Lab Sample IDs: 1783040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.9	96.1	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 SMP	MS
			LCS	MS	MS		
EPA 180.1 Rev. 2.0	Turbidity					0.454	
EPA 300.0 Rev. 2.1	Chloride	103	102	102	102		0.147
	Sulfate	99.8	97.4	97.6	99.6		0.211
EPA 350.1 Rev. 2.0	Ammonia-N	96.9	96.4	97.4			1.00
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	101	109			6.98
	Kjeldahl Nitrogen	100	97.7	101			3.68
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	98.0	98.5			0.509
EPA 365.1 Rev. 2.0	Total-P	96.5	98.8	101			1.91
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.2	97.0	100			3.44
SM 2120 B	Color (true)					1.87	
SM 2320 B-97	Total Alkalinity	102				0.224	
SM 2540 C-97	TDS					1.12	
	TDS					1.93	
SM 4500 F-C-97	Fluoride	96.3	97.4	97.4			0.0
SM 5310 B-00	Organic Carbon	93.8	92.2	92.5			0.316

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1783037, 1783038
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1783037, 1783038
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1783037, 1783038
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1783039, 1783040
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1783039, 1783040
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1783039, 1783040
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1783039, 1783040
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1783041, 1783042
SM 2120 B / E31780	True Color measured at 450 nm	1783037, 1783038
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1783037, 1783038
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1783037, 1783038
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1783037, 1783038
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1783037, 1783038
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1783039, 1783040

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	03/24/2016			03/24/2016 13:23	Sima Feizi	1783037, 1783038
EPA 300.0 Rev. 2.1	03/24/2016			03/25/2016	Julia Storbeck	1783037, 1783038
EPA 350.1 Rev. 2.0	03/24/2016			03/31/2016	Diana M. Turner	1783039, 1783040
EPA 351.2 Rev. 2.0	03/24/2016	04/04/2016	Sofia Elnemr	04/05/2016	Virginia P. Brown	1783039
	03/24/2016	04/04/2016	Sofia Elnemr	04/06/2016	Christopher Armour	1783040
EPA 353.2 Rev. 2.0	03/24/2016			03/25/2016	Diana M. Turner	1783039, 1783040
EPA 365.1 Rev. 2.0	03/24/2016	03/31/2016	Christopher Armour	04/04/2016	Rochelle Y Jackson	1783039, 1783040
EPA 365.1 Rev. 2.0 dissolved	03/24/2016			03/24/2016 11:04	Ping Hua	1783041
	03/24/2016			03/24/2016 11:23	Ping Hua	1783042
SM 2120 B	03/24/2016			03/24/2016 12:21	Rochelle Y Jackson	1783037
	03/24/2016			03/24/2016 12:22	Rochelle Y Jackson	1783038
SM 2320 B-97	03/24/2016			03/29/2016	Dale L. Simmons	1783037, 1783038
SM 2540 C-97	03/24/2016			03/28/2016	Sima Feizi	1783037, 1783038
SM 2540 D-97	03/24/2016			03/28/2016	Sima Feizi	1783037, 1783038
SM 4500 F-C-97	03/24/2016			03/29/2016	Dale L. Simmons	1783037, 1783038
SM 5310 B-00	03/24/2016			03/30/2016	Sofia Elnemr	1783039, 1783040