

Chemical Analysis Report

NW-DIST-2017-12-06-01

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

Event Description: **Eglin WBID 361 445**
Request ID: **RQ-2017-12-11-28**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government St
Suite 208A
Pensacola, FL 32502-5794
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Certified by: Colin Wright, Program Administrator

Date Certified: 22-DEC-2017 14:02

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular 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: ROCKY CK @ E.R. 200/201

Collection Date/Time: 12/05/2017 11:40

Field ID: G3NW0059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1950955	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P336517	
	EPA 300.0 Rev. 2.1	Chloride	1.9		mg Cl/L	P336534	
		Sulfate	0.56		mg SO4/L	P336536	
	SM 2120 B	Color (true)	11		PCU	P336508	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P336989	
	SM 2540 C-97	TDS	15	U	mg/L	P336956	
	SM 2540 D-97	TSS	2	I	mg/L	P337095	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P336992	
1950957	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P336936	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P336755	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P336604	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P336733	
	SM 5310 B-00	Organic Carbon	0.78	I	mg C/L	P336704	
1950959	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P336504	

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: OPEN BR. ABOVE E.R. 214/374

Collection Date/Time: 12/05/2017 12:10

Field ID: G3NW0105

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1950956	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P336517	
	EPA 300.0 Rev. 2.1	Chloride	1.5		mg Cl/L	P336534	
		Sulfate	0.50	I	mg SO4/L	P336536	
	SM 2120 B	Color (true)	8.9		PCU	P336508	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P336989	
	SM 2540 C-97	TDS	15	U	mg/L	P336956	
	SM 2540 D-97	TSS	2	I	mg/L	P337095	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P336992	
1950958	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P336936	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P336758	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022		mg N/L	P336604	
	EPA 365.1 Rev. 2.0	Total-P	0.005		mg P/L	P336733	
	SM 5310 B-00	Organic Carbon	0.92	I	mg C/L	P336704	
1950960	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P336504	

Ref. Method and Comment:

SM 2540 D-97: 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: P336517

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: P336534

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336536

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336936

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336755

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336758

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P336604

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P336733

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336504

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

Reference Method: SM 2120 B
Batch ID: P336508

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P336989

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

Reference Method: SM 2540 C-97
Batch ID: P336956

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P337095

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P336992

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P336704

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: P336534

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	93.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336536

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	93.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336936

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: P336755

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P336755

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P336758

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P336604

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: P336733

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P336504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.4		P	90 - 110

Reference Method: SM 2320 B-97
 Batch ID: P336989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	95 - 108

Reference Method: SM 4500 F-C-97
 Batch ID: P336992

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.4		P	92 - 103

Reference Method: SM 5310 B-00
 Batch ID: P336704

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P336534

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950836	Chloride	92.2		P	90 - 110
1950903	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336536

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950836	Sulfate	93.6		P	90 - 110
1950903	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336936

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950907	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950907	Kjeldahl Nitrogen	93.9	94.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336758

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950974	Kjeldahl Nitrogen	90.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P336604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950957	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P336733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950972	Total-P	108	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950960	O-Phosphate-P	98.1	98.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P336992

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1951399	Fluoride	98.0	98.0	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P336704

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1950871	Organic Carbon	99.7	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P336517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950926	Turbidity	0.617	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950903	Chloride	0.260	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P336536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950903	Sulfate	0.300	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950907	Ammonia-N	1.77	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950907	Kjeldahl Nitrogen	0.323	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P336758

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950974	Kjeldahl Nitrogen	4.91	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P336604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950957	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P336733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950972	Total-P	6.77	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P336504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950960	O-Phosphate-P	0.102	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P336508

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950968	Color (true)	1.80	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P336989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1951399	Total Alkalinity	0.485	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P336956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950903	TDS	5.53	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P336992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1951399	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P336704

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1950871	Organic Carbon	0.988	Spike	P	0 - 20

Quality Assurance Report Precision

* 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: A80735
Included Lab Sample IDs: 1950955, 1950956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.7	99.2	P/P	90 - 110
Sulfate	96.9	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A80741
Included Lab Sample IDs: 1950959, 1950960

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.6	97.3	P/P	90 - 110
O-Phosphate-P	97.3	98.5	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A80742
Included Lab Sample IDs: 1950955, 1950956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.6	98.4	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A80743
Included Lab Sample IDs: 1950955, 1950956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A80766
Included Lab Sample IDs: 1950957, 1950958

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

Reference Method: SM 5310 B-00
Run ID: A80808
Included Lab Sample IDs: 1950957, 1950958

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	99.5	P/P	90 - 110
Organic Carbon	99.5	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80863

Included Lab Sample IDs: 1950957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.9	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80866

Included Lab Sample IDs: 1950957, 1950958

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.5	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80882

Included Lab Sample IDs: 1950958

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.2	99.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80886

Included Lab Sample IDs: 1950957, 1950958

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

Reference Method: SM 2320 B-97

Run ID: A80909

Included Lab Sample IDs: 1950955, 1950956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A80909

Included Lab Sample IDs: 1950955, 1950956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				0.617	
EPA 300.0 Rev. 2.1	Chloride	93.0	104	92.2	0.260	
	Sulfate	93.3	103	93.6	0.300	
EPA 350.1 Rev. 2.0	Ammonia-N	103	101	103		1.77

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	93.9	94.2		0.323
	Kjeldahl Nitrogen	102	90.2	100		4.91
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	103	104	104		0.0
EPA 365.1 Rev. 2.0	Total-P	102	108	101		6.77
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	95.4	98.1	98.0		0.102
SM 2120 B	Color (true)				1.80	
SM 2320 B-97	Total Alkalinity	100			0.485	
SM 2540 C-97	TDS				5.53	
SM 4500 F-C-97	Fluoride	96.4	98.0	98.0		0.0
SM 5310 B-00	Organic Carbon	96.4	99.7	101		0.988

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1950955, 1950956
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1950955, 1950956
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1950955, 1950956
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1950957, 1950958
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1950957, 1950958
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1950957, 1950958
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1950957, 1950958
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1950959, 1950960
SM 2120 B / E31780	True Color measured at 450 nm	1950955, 1950956
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1950955, 1950956
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1950955, 1950956
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1950955, 1950956
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1950955, 1950956
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1950957, 1950958

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	12/06/2017			12/06/2017 16:45	DeAsia Armster	1950955, 1950956
EPA 300.0 Rev. 2.1	12/06/2017			12/07/2017	Julia Storbeck	1950955, 1950956
EPA 350.1 Rev. 2.0	12/06/2017			12/13/2017	Sofia Elnemr	1950957, 1950958
EPA 351.2 Rev. 2.0	12/06/2017	12/11/2017	Adrian Shelby	12/13/2017	Joseph Suarez	1950957
	12/06/2017	12/12/2017	Adrian Shelby	12/13/2017	Joseph Suarez	1950958
EPA 353.2 Rev. 2.0	12/06/2017			12/07/2017	Beverly Y. Sanders	1950957, 1950958
EPA 365.1 Rev. 2.0	12/06/2017	12/11/2017	Sima Feizi	12/13/2017	Beverly Y. Sanders	1950957, 1950958
EPA 365.1 Rev. 2.0 dissolved	12/06/2017			12/06/2017 15:36	Megan Treadwell	1950960
	12/06/2017			12/06/2017 15:51	Megan Treadwell	1950959
SM 2120 B	12/06/2017			12/06/2017 15:52	Tanya Welborn	1950955
	12/06/2017			12/06/2017 15:53	Tanya Welborn	1950956
SM 2320 B-97	12/06/2017			12/14/2017	Dale L. Simmons	1950955, 1950956
SM 2540 C-97	12/06/2017			12/08/2017	Yijie Li	1950955, 1950956
SM 2540 D-97	12/06/2017			12/08/2017	Yijie Li	1950955, 1950956
SM 4500 F-C-97	12/06/2017			12/14/2017	Dale L. Simmons	1950955, 1950956
SM 5310 B-00	12/06/2017			12/08/2017	Ping Hua	1950957, 1950958