

Chemical Analysis Report

NE-DIST-2017-11-09-02

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

Event Description: **LSJR SOUTH 1**
Request ID: **RQ-2017-11-06-31**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 05-DEC-2017 12:00



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: Miramar Creek @ Gadsen Rd

Collection Date/Time: 11/08/2017 09:25

Field ID: G2NE0833 11072017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945338	EPA 180.1 Rev. 2.0	Turbidity	8.0		NTU	P335052	
	EPA 300.0 Rev. 2.1	Chloride	28		mg Cl/L	P335191	
		Sulfate	60		mg SO4/L	P335193	
	SM 2120 B	Color (true)	20		PCU	P335044	
	SM 2320 B-97	Total Alkalinity	93		mg CaCO3/L	P335625	
	SM 2540 C-97	TDS	252		mg/L	P335488	
	SM 2540 D-97	TSS	6	I	mg/L	P335274	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P335629	
1945340	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P336003	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P335809	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.34		mg N/L	P335479	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P335387	
	SM 5310 B-00	Organic Carbon	6.0		mg C/L	P335609	
1945342	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P335084	

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: Miller Creek @ Beach Blvd

Collection Date/Time: 11/08/2017 09:45

Field ID: G2NE0836 11072017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945339	EPA 180.1 Rev. 2.0	Turbidity	9.4	A	NTU	P335053	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P335191	
		Sulfate	58		mg SO4/L	P335193	
	SM 2120 B	Color (true)	67	A	PCU	P335045	
	SM 2320 B-97	Total Alkalinity	81		mg CaCO3/L	P335625	
	SM 2540 C-97	TDS	233		mg/L	P335488	
	SM 2540 D-97	TSS	2	UA	mg/L	P335274	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P335629	
1945341	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P336003	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51		mg N/L	P335809	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.46		mg N/L	P335479	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P335447	
	SM 5310 B-00	Organic Carbon	5.6		mg C/L	P335609	
1945343	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.028		mg P/L	P335084	

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: P335052

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: P335053

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335191

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335193

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335809

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335479

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335387

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335447

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335084

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: P335044

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P335045

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P335625

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

Reference Method: SM 2540 C-97
Batch ID: P335488

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P335274

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P335629

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P335609

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: P335191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335193

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: P335193

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335809

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335479

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335447

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: P335084

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

Reference Method: SM 2320 B-97
Batch ID: P335625

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P335629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
 Batch ID: P335609

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P335191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945177	Chloride	98.8		P	90 - 110
1945198	Chloride	95.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P335193

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945177	Sulfate	100		P	90 - 110
1945198	Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P336003

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945743	Ammonia-N	96.8	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P335809

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945200	Kjeldahl Nitrogen	104	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P335479

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945340	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P335387

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945200	Total-P	99.5	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P335447

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945341	Total-P	96.8	95.3	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335084

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945172	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P335629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945798	Fluoride	100	101	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P335609

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945182	Organic Carbon	100	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P335052

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945197	Turbidity	0.122	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P335053

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945339	Turbidity	0.214	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945198	Chloride	0.297	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335193

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945198	Sulfate	0.270	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945743	Ammonia-N	1.00	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335809

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945200	Kjeldahl Nitrogen	1.10	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335479

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945340	NO2NO3-N	0.184	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945200	Total-P	2.67	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945341	Total-P	1.36	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945172	O-Phosphate-P	0.984	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P335044

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945175	Color (true)	6.97	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P335045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945339	Color (true)	2.49	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P335625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945798	Total Alkalinity	0.644	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P335488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945197	TDS	3.54	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P335629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945798	Fluoride	0.479	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P335609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945182	Organic Carbon	0.0455	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: SM 2120 B
Run ID: A80175
Included Lab Sample IDs: 1945338, 1945339

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	85 - 115
Color (true)	103	103	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A80181
Included Lab Sample IDs: 1945338, 1945339

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 365.1 Rev. 2.0 dissolved
Run ID: A80192
Included Lab Sample IDs: 1945342, 1945343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	102	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A80230
Included Lab Sample IDs: 1945338, 1945339

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A80230

Included Lab Sample IDs: 1945338, 1945339

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	103	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A80324

Included Lab Sample IDs: 1945340, 1945341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A80378

Included Lab Sample IDs: 1945340, 1945341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80380

Included Lab Sample IDs: 1945340

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	103	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A80383

Included Lab Sample IDs: 1945338, 1945339

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A80383

Included Lab Sample IDs: 1945338, 1945339

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80391

Included Lab Sample IDs: 1945341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80551

Included Lab Sample IDs: 1945340, 1945341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.7	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
 Run ID: A80561
 Included Lab Sample IDs: 1945340, 1945341

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.8	101	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				0.122	
	Turbidity				0.214	
EPA 300.0 Rev. 2.1	Chloride	97.8	95.9 98.8		0.297	
	Sulfate	98.3	99.1 100		0.270	
EPA 350.1 Rev. 2.0	Ammonia-N	94.9	96.8 97.8			1.00
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	104 103			1.10
EPA 353.2 Rev. 2.0	NO2NO3-N	106	100			0.184
EPA 365.1 Rev. 2.0	Total-P	98.0	99.5 96.7			2.67
	Total-P	100	96.8 95.3			1.36
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	101 102			0.984
SM 2120 B	Color (true)				6.97	
	Color (true)				2.49	
SM 2320 B-97	Total Alkalinity	103			0.644	
SM 2540 C-97	TDS				3.54	
SM 4500 F-C-97	Fluoride	100	100 101			0.479
SM 5310 B-00	Organic Carbon	99.0	100 100			0.0455

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1945338, 1945339
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1945338, 1945339
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1945338, 1945339
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1945340, 1945341
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1945340, 1945341
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1945340, 1945341
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1945340, 1945341
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1945342, 1945343
SM 2120 B / E31780	True Color measured at 450 nm	1945338, 1945339
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1945338, 1945339
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1945338, 1945339
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1945338, 1945339

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1945338, 1945339
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1945340, 1945341

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	11/09/2017			11/09/2017 14:56	DeAsia Armster	1945338, 1945339
EPA 300.0 Rev. 2.1	11/09/2017			11/14/2017	Julia Storbeck	1945338, 1945339
EPA 350.1 Rev. 2.0	11/09/2017			11/28/2017	Sofia Elnemr	1945340, 1945341
EPA 351.2 Rev. 2.0	11/09/2017	11/22/2017	Adrian Shelby	11/27/2017	Joseph Suarez	1945340, 1945341
EPA 353.2 Rev. 2.0	11/09/2017			11/16/2017	Beverly Y. Sanders	1945340, 1945341
EPA 365.1 Rev. 2.0	11/09/2017	11/16/2017	Sima Feizi	11/17/2017	Lipi Saha	1945340
	11/09/2017	11/16/2017	Sima Feizi	11/20/2017	Lipi Saha	1945341
EPA 365.1 Rev. 2.0 dissolved	11/09/2017			11/09/2017 15:33	Megan Treadwell	1945342
	11/09/2017			11/09/2017 15:34	Megan Treadwell	1945343
SM 2120 B	11/09/2017			11/09/2017 15:03	Tanya Welborn	1945338
	11/09/2017			11/09/2017 15:07	Tanya Welborn	1945339
SM 2320 B-97	11/09/2017			11/18/2017	Dale L. Simmons	1945338, 1945339
SM 2540 C-97	11/09/2017			11/13/2017	DeAsia Armster	1945338, 1945339
SM 2540 D-97	11/09/2017			11/13/2017	DeAsia Armster	1945338, 1945339
SM 4500 F-C-97	11/09/2017			11/18/2017	Dale L. Simmons	1945338, 1945339
SM 5310 B-00	11/09/2017			11/18/2017	Ping Hua	1945340, 1945341