Chemical Analysis Report

CEN-DIST-2017-01-05-02

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

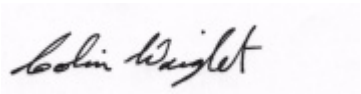
Event Description: **Lk Amoret/Reedy Crk Blw Rus**
Request ID: **RQ-2017-01-02-40**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Mike Linger

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, PhD, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 31-JAN-2017 10:58



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: LAKE AMORET 85 M SW OF CENTER **Collection Date/Time: 01/04/2017 12:12**

Field ID: G4CE0072 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1861545	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P317816	
	EPA 300.0 Rev. 2.1	Chloride	14	A	mg Cl/L	P318217	
		Sulfate	17	A	mg SO4/L	P318218	
	SM 2120 B	Color (true)	22	A	PCU	P317811	
	SM 2320 B-97	Total Alkalinity	30	A	mg CaCO3/L	P317915	
	SM 2540 C-97	TDS	91		mg/L	P318414	
	SM 2540 D-97	TSS	2	U	mg/L	P318206	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P317918	
1861547	EPA 350.1 Rev. 2.0	Ammonia-N	0.26		mg N/L	P317987	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.97	J	mg N/L	P317920	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P318093	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P317958	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P317927	
1861549	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P317807	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Refer to the narrative for an explanation of QC Codes.

Sample Location: REEDY CREEK @ 315M DS OF LAKE RUSSELL Collection Date/Time: 01/04/2017 13:49

Field ID: G4CE0050 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1861546	EPA 180.1 Rev. 2.0	Turbidity	5.2	A	NTU	P317816	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P318217	
		Sulfate	1.3		mg SO4/L	P318218	
	SM 2120 B	Color (true)	430		PCU	P317811	
	SM 2320 B-97	Total Alkalinity	37		mg CaCO3/L	P317915	
	SM 2540 C-97	TDS	134	A	mg/L	P318415	
	SM 2540 D-97	TSS	6	I	mg/L	P318207	
	SM 4500 F-C-97	Fluoride	0.087	I	mg F/L	P317918	
1861548	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P317988	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P317920	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.097		mg N/L	P318093	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P317958	
	SM 5310 B-00	Organic Carbon	36		mg C/L	P317927	
1861550	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.057		mg P/L	P317807	

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P317816

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318217

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318218

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317987

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317988

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317920

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P318093

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317958

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317807

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: P317811

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P317915

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

Reference Method: SM 2540 C-97
Batch ID: P318414

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P318415

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P318206

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P318207

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P317918

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P317927

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: P318217

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318217

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318218

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317987

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317988

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: P317920

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P318093

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317958

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317807

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

Reference Method: SM 2320 B-97
Batch ID: P317915

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P317918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P317927

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318217

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861545	Chloride	98.1		P	90 - 110
1861546	Chloride	96.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318218

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861545	Sulfate	95.6		P	90 - 110
1861546	Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861548	Ammonia-N	97.7	96.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317920

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861547	Kjeldahl Nitrogen	104	112	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P318093

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861511	NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861535	Total-P	95.4	94.3	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317807

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861538	O-Phosphate-P	96.9	97.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P317918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861545	Fluoride	94.0	95.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P317927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1861468	Organic Carbon	94.4	94.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P317816

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861546	Turbidity	1.16	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318217

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861545	Chloride	0.0475	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P318218

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861545	Sulfate	0.193	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861488	Ammonia-N	1.35	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P317988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861548	Ammonia-N	0.586	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P317920

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861547	Kjeldahl Nitrogen	4.14	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P318093

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861511	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P317958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861535	Total-P	0.905	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P317807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861538	O-Phosphate-P	0.291	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P317811

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861545	Color (true)	1.83	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P317915

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861545	Total Alkalinity	0.671	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P318414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861507	TDS	2.72	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P318415

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861546	TDS	0.749	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 4500 F-C-97
Batch ID: P317918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861545	Fluoride	1.02	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P317927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1861468	Organic Carbon	0.0610	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: A73759
Included Lab Sample IDs: 1861545, 1861546

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A73760
Included Lab Sample IDs: 1861549, 1861550

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.3	96.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A73761
Included Lab Sample IDs: 1861545, 1861546

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

Reference Method: SM 2320 B-97
Run ID: A73806
Included Lab Sample IDs: 1861545, 1861546

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

Reference Method: SM 4500 F-C-97
Run ID: A73806
Included Lab Sample IDs: 1861545, 1861546

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A73807
Included Lab Sample IDs: 1861547, 1861548

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	96.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A73827
Included Lab Sample IDs: 1861547, 1861548

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	95.5	95.6	P/P	90 - 110
Ammonia-N	99.6	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A73843
Included Lab Sample IDs: 1861548

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A73851
Included Lab Sample IDs: 1861547, 1861548

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	97.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A73852
Included Lab Sample IDs: 1861547, 1861548

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	106	P/P	90 - 110
Kjeldahl Nitrogen	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A73872
Included Lab Sample IDs: 1861547

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.0	95.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A73881
Included Lab Sample IDs: 1861545, 1861546

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	100	P/P	90 - 110
Sulfate	96.3	93.7	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					1.16	
EPA 300.0 Rev. 2.1	Chloride	98.6	98.1	96.8		0.0475	
	Sulfate	96.4	95.6	96.9		0.193	
EPA 350.1 Rev. 2.0	Ammonia-N	105					1.35
	Ammonia-N	103	97.7	96.9			0.586
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	104	112			4.14
EPA 353.2 Rev. 2.0	NO2NO3-N	101	99.0	99.0			0.0
EPA 365.1 Rev. 2.0	Total-P	96.0	95.4	94.3			0.905
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	96.9	97.3			0.291
SM 2120 B	Color (true)					1.83	
SM 2320 B-97	Total Alkalinity	104				0.671	
SM 2540 C-97	TDS					2.72	
	TDS					0.749	
SM 4500 F-C-97	Fluoride	96.0	94.0	95.1			1.02
SM 5310 B-00	Organic Carbon	93.2	94.4	94.6			0.0610

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1861545, 1861546
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1861545, 1861546
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1861545, 1861546
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1861547, 1861548
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1861547, 1861548
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1861547, 1861548
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1861547, 1861548
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1861549, 1861550
SM 2120 B / E31780	True Color measured at 450 nm	1861545, 1861546
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1861545, 1861546
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1861545, 1861546
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1861545, 1861546
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1861545, 1861546
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1861547, 1861548

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	01/05/2017			01/05/2017 16:07	Sima Feizi	1861545, 1861546
EPA 300.0 Rev. 2.1	01/05/2017			01/12/2017	Ping Hua	1861545, 1861546
EPA 350.1 Rev. 2.0	01/05/2017			01/09/2017	Sofia Elnemr	1861547, 1861548
EPA 351.2 Rev. 2.0	01/05/2017	01/09/2017	Adrian Shelby	01/10/2017	Joseph Suarez	1861547, 1861548
EPA 353.2 Rev. 2.0	01/05/2017			01/10/2017	Beverly Y. Sanders	1861547, 1861548
EPA 365.1 Rev. 2.0	01/05/2017	01/09/2017	Vijayalakshmi Reddy	01/10/2017	Beverly Y. Sanders	1861548
	01/05/2017	01/09/2017	Vijayalakshmi Reddy	01/11/2017	Lipi Saha	1861547
EPA 365.1 Rev. 2.0 dissolved	01/05/2017			01/05/2017 15:26	Lipi Saha	1861549
	01/05/2017			01/05/2017 15:27	Lipi Saha	1861550
SM 2120 B	01/05/2017			01/05/2017 15:50	Jared I. Manley	1861545
	01/05/2017			01/05/2017 15:54	Jared I. Manley	1861546
SM 2320 B-97	01/05/2017			01/07/2017	Dale L. Simmons	1861545, 1861546
SM 2540 C-97	01/05/2017			01/09/2017	Sima Feizi	1861545, 1861546
SM 2540 D-97	01/05/2017			01/09/2017	Sima Feizi	1861545, 1861546
SM 4500 F-C-97	01/05/2017			01/07/2017	Dale L. Simmons	1861545, 1861546
SM 5310 B-00	01/05/2017			01/07/2017	Julie Michelle Frank	1861547, 1861548