

Chemical Analysis Report

SW-DIST-2016-05-04-01

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

Event Description: **1329Z, 1329P, 1392A**

Request ID: **RQ-2016-05-02-73**

Customer: **SW-DIST**

Project ID: **SMP**

Send Reports to:

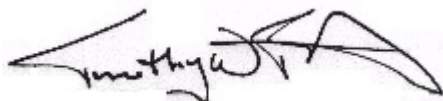
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Stephen Clingerman

For additional information please contact

Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Colin Wright, Ph.D.
Thekkekalathil Chandrasekhar, PhD, QA Officer
Phone (850) 245-8085

Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 31-MAY-2016 15:09



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 IOLA EAST

Collection Date/Time: 05/03/2016 09:10

Field ID: G5SW0019

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795771	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P303541	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P304194	
		Sulfate	6.6		mg SO4/L	P304198	
	SM 2120 B	Color (true)	8.7		PCU	P303560	
	SM 2320 B-97	Total Alkalinity	35		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	99		mg/L	P304341	
	SM 2540 D-97	TSS	2	I	mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.10		mg F/L	P304123	
1795781	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P304089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P304502	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304161	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P304574	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P304748	
1795791	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303553	

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: LAKE IOLA WEST

Collection Date/Time: 05/03/2016 09:25

Field ID: G5SW0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795772	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P303541	
	EPA 300.0 Rev. 2.1	Chloride	17	A	mg Cl/L	P304287	
		Sulfate	6.5	A	mg SO4/L	P304290	
	SM 2120 B	Color (true)	8.2		PCU	P303560	
	SM 2320 B-97	Total Alkalinity	35		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	94		mg/L	P304341	
	SM 2540 D-97	TSS	3	I	mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.10		mg F/L	P304123	
1795782	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P304089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P304502	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P304574	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P304748	
1795792	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303553	

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: NEFF LAKE SW

Collection Date/Time: 05/03/2016 10:10

Field ID: G4SW0089

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795773	EPA 180.1 Rev. 2.0	Turbidity	14	A	NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P304287	
		Sulfate	1.6		mg SO4/L	P304290	

Field ID: G4SW0089

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795773	SM 2120 B	Color (true)	150		PCU	P303560	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	83		mg/L	P304341	
	SM 2540 D-97	TSS	12		mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.088	I	mg F/L	P304123	
1795783	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P304089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P304502	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.078		mg P/L	P304574	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P304748	
1795793	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303553	

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: NEFF LAKE SE

Collection Date/Time: 05/03/2016 10:20

Field ID: G4SW0090

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795774	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P304287	
		Sulfate	1.6		mg SO4/L	P304290	
	SM 2120 B	Color (true)	150		PCU	P303560	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	85		mg/L	P304341	
	SM 2540 D-97	TSS	17		mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.089	I	mg F/L	P304123	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P304089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P304502	
1795784	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.089		mg P/L	P304574	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P304748	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303553	

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: NEFF LAKE N

Collection Date/Time: 05/03/2016 10:35

Field ID: G4SW0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795775	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P304287	
		Sulfate	1.6		mg SO4/L	P304290	
	SM 2120 B	Color (true)	150		PCU	P303561	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	80		mg/L	P304341	
	SM 2540 D-97	TSS	12		mg/L	P304172	

Field ID: G4SW0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795775	SM 4500 F-C-97	Fluoride	0.088	I	mg F/L	P304123	
1795785	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P304090	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P304502	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.088		mg P/L	P304574	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P304748	
1795795	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303553	

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: NEFF LAKE C

Collection Date/Time: 05/03/2016 10:45

Field ID: G4SW0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795776	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P304287	
		Sulfate	1.7		mg SO4/L	P304290	
	SM 2120 B	Color (true)	150		PCU	P303561	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	69		mg/L	P304341	
	SM 2540 D-97	TSS	12		mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.089	I	mg F/L	P304123	
1795786	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P304090	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P304502	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.072		mg P/L	P304574	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P304748	
1795796	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P303553	

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: DOWLING LAKE 1

Collection Date/Time: 05/03/2016 11:35

Field ID: G4SW0083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795777	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P304287	
		Sulfate	4.6		mg SO4/L	P304290	
	SM 2120 B	Color (true)	61	A	PCU	P303561	
	SM 2320 B-97	Total Alkalinity	20	A	mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	74		mg/L	P304341	
	SM 2540 D-97	TSS	3	I	mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P304123	
1795787	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P304090	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P304502	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	

Field ID: G4SW0083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795787	EPA 365.1 Rev. 2.0	Total-P	0.054		mg P/L	P304605	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P304749	
1795797	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P303553	

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: DOWLING LAKE 2

Collection Date/Time: 05/03/2016 11:45

Field ID: G4SW0084

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795778	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P304287	
		Sulfate	4.6		mg SO4/L	P304290	
	SM 2120 B	Color (true)	60		PCU	P303561	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P304329	
	SM 2540 C-97	TDS	78		mg/L	P304341	
	SM 2540 D-97	TSS	2	U	mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P304123	
1795788	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P304090	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P304504	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P304605	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P304749	
1795798	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P303554	

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: DOWLING LAKE 3

Collection Date/Time: 05/03/2016 11:55

Field ID: G4SW0085

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795779	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P304287	
		Sulfate	4.6		mg SO4/L	P304290	
	SM 2120 B	Color (true)	59		PCU	P303561	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P304240	
	SM 2540 C-97	TDS	78		mg/L	P304341	
	SM 2540 D-97	TSS	2	U	mg/L	P304172	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P304241	
1795789	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P304090	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P304504	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P304605	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P304749	
1795799	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P303554	

Field ID: G4SW0085

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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: DOWLING LAKE 4

Collection Date/Time: 05/03/2016 12:05

Field ID: G4SW0086

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1795780	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P303542	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P304287	
		Sulfate	4.7		mg SO4/L	P304290	
	SM 2120 B	Color (true)	60		PCU	P303561	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P304240	
	SM 2540 C-97	TDS	67		mg/L	P304342	
	SM 2540 D-97	TSS	2	I	mg/L	P304173	
1795790	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P304241	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P304090	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P304504	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304163	
	EPA 365.1 Rev. 2.0	Total-P	0.075		mg P/L	P304605	
1795800	SM 5310 B-00	Organic Carbon	11		mg C/L	P304749	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P303554	

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: P303541

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P303542

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P304194

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P304198

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304287

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304089

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304090

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304502

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304161

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304163

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304574

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303553

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303554

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

Reference Method: SM 2120 B
Batch ID: P303560

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P303561

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P304240

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

Reference Method: SM 2320 B-97
Batch ID: P304329

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

Reference Method: SM 2540 C-97
Batch ID: P304341

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P304342

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P304172

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P304173

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P304123

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P304748

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: SM 5310 B-00
Batch ID: P304749

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: P304194

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304198

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304287

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: P304287

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304089

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304090

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: P304502

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

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: P304161

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304163

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304574

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.4		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303553

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303554

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

Reference Method: SM 2320 B-97
Batch ID: P304240

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

Reference Method: SM 2320 B-97
Batch ID: P304329

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

Reference Method: SM 4500 F-C-97
Batch ID: P304123

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.5		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P304748

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.6		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P304749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304194

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795378	Chloride	98.6		P	90 - 110
1795695	Chloride	97.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304198

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795378	Sulfate	97.0		P	90 - 110
1795695	Sulfate	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795772	Chloride	95.1		P	90 - 110
1795779	Chloride	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795772	Sulfate	93.5		P	90 - 110
1795779	Sulfate	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795698	Ammonia-N	93.2	94.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304090

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795785	Ammonia-N	93.9	96.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795781	Kjeldahl Nitrogen	105	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795788	Kjeldahl Nitrogen	96.9	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304161

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795675	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304163

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795782	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795722	Total-P	100	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795787	Total-P	99.3	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795791	O-Phosphate-P	98.0	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303554

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795798	O-Phosphate-P	99.4	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P304123

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795777	Fluoride	97.9	97.9	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796172	Fluoride	96.6	97.9	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P304748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795364	Organic Carbon	98.4	100	P/P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P304749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1795787	Organic Carbon	95.4	98.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P303541

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795695	Turbidity	4.09	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P303542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795773	Turbidity	1.40	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795695	Chloride	0.0722	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304198

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795695	Sulfate	2.09	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795772	Chloride	0.0368	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304290

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795772	Sulfate	2.96	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795698	Ammonia-N	1.21	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795785	Ammonia-N	1.99	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795781	Kjeldahl Nitrogen	0.801	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795788	Kjeldahl Nitrogen	2.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795675	NO2NO3-N	0.501	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795782	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795722	Total-P	1.71	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795787	Total-P	1.65	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795791	O-Phosphate-P	1.32	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303554

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795798	O-Phosphate-P	0.520	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P303560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795696	Color (true)	0.359	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P303561

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795777	Color (true)	0.908	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304240

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796172	Total Alkalinity	0.109	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P304329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795777	Total Alkalinity	0.300	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P304341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795718	TDS	7.25	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P304342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795840	TDS	2.23	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P304123

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795777	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P304241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796172	Fluoride	0.959	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P304748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795364	Organic Carbon	1.39	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P304749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1795787	Organic Carbon	2.20	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 180.1 Rev. 2.0
Run ID: A69278
Included Lab Sample IDs: 1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A69280
Included Lab Sample IDs: 1795791, 1795792, 1795793, 1795794, 1795795, 1795796, 1795797, 1795798, 1795799, 1795800

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

Reference Method: SM 2120 B
Run ID: A69282
Included Lab Sample IDs: 1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780

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

Reference Method: SM 2120 B

Run ID: A69282

Included Lab Sample IDs: 1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.8	99.9	P/P	90 - 115
Color (true)	99.9	99.8	P/P	90 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A69423

Included Lab Sample IDs: 1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	99.1	P/P	90 - 110
Chloride	99.0	100	P/P	90 - 110
Chloride	100	99.0	P/P	90 - 110
Sulfate	98.2	98.1	P/P	90 - 110
Sulfate	99.0	98.2	P/P	90 - 110
Sulfate	99.5	96.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A69427

Included Lab Sample IDs: 1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.4	95.0	P/P	90 - 110
Ammonia-N	95.0	95.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A69434

Included Lab Sample IDs: 1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	100	P/P	90 - 110
Fluoride	99.0	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A69443

Included Lab Sample IDs: 1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790

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

Reference Method: SM 2320 B-97

Run ID: A69463

Included Lab Sample IDs: 1795779, 1795780

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A69463

Included Lab Sample IDs: 1795779, 1795780

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

Reference Method: SM 2320 B-97

Run ID: A69481

Included Lab Sample IDs: 1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.4	P/P	90 - 110
Total Alkalinity	99.4	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69582

Included Lab Sample IDs: 1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	95.5	P/P	90 - 110
Kjeldahl Nitrogen	94.5	100	P/P	90 - 110
Kjeldahl Nitrogen	94.9	97.4	P/P	90 - 110
Kjeldahl Nitrogen	95.5	95.3	P/P	90 - 110
Kjeldahl Nitrogen	97.4	95.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69598

Included Lab Sample IDs: 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790

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

Reference Method: SM 5310 B-00

Run ID: A69610

Included Lab Sample IDs: 1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.2	100	P/P	90 - 110
Organic Carbon	99.8	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69622

Included Lab Sample IDs: 1795781, 1795782

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	97.8	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	MS
EPA 180.1 Rev. 2.0	Turbidity				4.09	
	Turbidity				1.40	
EPA 300.0 Rev. 2.1	Chloride	100	97.8	98.6	0.0722	
	Chloride	96.5	95.1	96.1	0.0368	
	Sulfate	97.7	96.1	97.0	2.09	
	Sulfate	94.0	93.5	94.3	2.96	
EPA 350.1 Rev. 2.0	Ammonia-N	94.5	93.2	94.5		1.21
	Ammonia-N	94.9	93.9	96.1		1.99
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.8	105	104		0.801
	Kjeldahl Nitrogen	104	96.9	102		2.95
EPA 353.2 Rev. 2.0	NO2NO3-N	104	104	103		0.501
	NO2NO3-N	104	104	104		0.0
EPA 365.1 Rev. 2.0	Total-P	102	100	103		1.71
	Total-P	97.4	99.3	101		1.65
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	98.0	99.3		1.32
	O-Phosphate-P	105	99.4	100		0.520
SM 2120 B	Color (true)				0.359	
	Color (true)				0.908	
SM 2320 B-97	Total Alkalinity	101			0.109	
	Total Alkalinity	101			0.300	
SM 2540 C-97	TDS				7.25	
	TDS				2.23	
SM 4500 F-C-97	Fluoride	99.5	97.9	97.9		0.0
	Fluoride	96.5	96.6	97.9		0.959
SM 5310 B-00	Organic Carbon	98.6	98.4	100		1.39
	Organic Carbon	99.6	95.4	98.8		2.20

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1795791, 1795792, 1795793, 1795794, 1795795, 1795796, 1795797, 1795798, 1795799, 1795800

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2120 B / E31780	True Color measured at 450 nm	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	05/04/2016			05/04/2016 15:16	Sima Feizi	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
EPA 300.0 Rev. 2.1	05/04/2016			05/12/2016	Elisa J Lutz	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
EPA 350.1 Rev. 2.0	05/04/2016			05/11/2016	Diana M. Turner	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 351.2 Rev. 2.0	05/04/2016	05/18/2016	Sofia Elnemr	05/19/2016	Vijayalakshmi Reddy	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 353.2 Rev. 2.0	05/04/2016			05/12/2016	Peter D. Kaus	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 365.1 Rev. 2.0	05/04/2016	05/19/2016	Vijayalakshmi Reddy	05/20/2016	Lipi Saha	1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790
EPA 365.1 Rev. 2.0 dissolved	05/04/2016	05/19/2016	Vijayalakshmi Reddy	05/23/2016	Lipi Saha	1795781, 1795782
	05/04/2016			05/04/2016 15:04	Julia Storbeck	1795791
	05/04/2016			05/04/2016 15:08	Julia Storbeck	1795798
	05/04/2016			05/04/2016 15:47	Julia Storbeck	1795792
	05/04/2016			05/04/2016 15:48	Julia Storbeck	1795793
	05/04/2016			05/04/2016 15:53	Julia Storbeck	1795794
	05/04/2016			05/04/2016 15:54	Julia Storbeck	1795795
	05/04/2016			05/04/2016 15:55	Julia Storbeck	1795796
	05/04/2016			05/04/2016 15:56	Julia Storbeck	1795797
	05/04/2016			05/04/2016 15:57	Julia Storbeck	1795799
	05/04/2016			05/04/2016 15:58	Julia Storbeck	1795800
	05/04/2016			05/05/2016 08:40	Rochelle Y Jackson	1795771
	05/04/2016			05/05/2016 08:41	Rochelle Y Jackson	1795772, 1795773
	05/04/2016			05/05/2016 08:42	Rochelle Y Jackson	1795774
SM 2120 B	05/04/2016			05/05/2016 08:45	Rochelle Y Jackson	1795775
	05/04/2016			05/05/2016 08:46	Rochelle Y Jackson	1795776
	05/04/2016			05/05/2016 08:47	Rochelle Y Jackson	1795777
	05/04/2016			05/05/2016 08:48	Rochelle Y Jackson	1795778
	05/04/2016			05/05/2016 08:49	Rochelle Y Jackson	1795779
	05/04/2016			05/05/2016 08:50	Rochelle Y Jackson	1795780
	05/04/2016			05/12/2016	Dale L. Simmons	1795779, 1795780
	05/04/2016			05/13/2016	Dale L. Simmons	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778
SM 2320 B-97	05/04/2016			05/06/2016	Yijie Li	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 D-97	05/04/2016			05/06/2016	Yijie Li	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778, 1795779, 1795780
SM 4500 F-C-97	05/04/2016			05/11/2016	Dale L. Simmons	1795771, 1795772, 1795773, 1795774, 1795775, 1795776, 1795777, 1795778
	05/04/2016			05/12/2016	Dale L. Simmons	1795779, 1795780
SM 5310 B-00	05/04/2016			05/21/2016	Rochelle Y Jackson	1795781, 1795782, 1795783, 1795784, 1795785, 1795786, 1795787, 1795788, 1795789, 1795790