

Chemical Analysis Report

SO-DIST-2016-02-26-01

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

Event Description: **SMP: Highlands Lakes**

Request ID: **RQ-2016-02-22-34**

Customer: **SO-DIST**

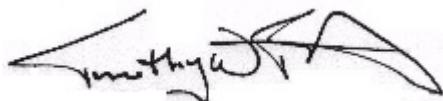
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901
Attn: Ben Paswater

For additional information please contact
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Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 16-MAR-2016 11:00

A handwritten signature in black ink, appearing to read "Timothy Fitzpatrick", with a stylized flourish at the end.

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 SIRENA WBID 1932C

Collection Date/Time: 02/25/2016 10:35

Field ID: LAKE SIRENA @ SOUTH SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774797	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P299647	
		Sulfate	24		mg SO4/L	P299649	
	SM 2120 B	Color (true)	6.3		PCU	P299362	
	SM 2320 B-97	Total Alkalinity	8.6		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	91		mg/L	P299884	
	SM 2540 D-97	TSS	2	I	mg/L	P299787	
	SM 4500 F-C-97	Fluoride	0.063	I	mg F/L	P299768	
1774807	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P300067	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P299676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.042		mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	5.5		mg C/L	P299515	
1774817	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 144 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: LAKE SIRENA WBID 1932C

Collection Date/Time: 02/25/2016 10:00

Field ID: LAKE SIRENA @ EAST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774798	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P299647	
		Sulfate	24		mg SO4/L	P299649	
	SM 2120 B	Color (true)	6.0	I	PCU	P299362	
	SM 2320 B-97	Total Alkalinity	9.0		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	86		mg/L	P299884	
	SM 2540 D-97	TSS	2	I	mg/L	P299787	
	SM 4500 F-C-97	Fluoride	0.063	I	mg F/L	P299768	
1774808	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P300067	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P299676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.043		mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	5.5		mg C/L	P299515	
1774818	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 144 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: LAKE SIRENA WBID 1932C

Collection Date/Time: 02/25/2016 10:25

Field ID: LAKE SIRENA @ MIDDLE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774799	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P299405	

Field ID: LAKE SIRENA @ MIDDLE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774799	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P299647	
		Sulfate	24		mg SO4/L	P299649	
	SM 2120 B	Color (true)	6.0		PCU	P299362	
	SM 2320 B-97	Total Alkalinity	8.9		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	84		mg/L	P299884	
	SM 2540 D-97	TSS	2	U	mg/L	P299787	
	SM 4500 F-C-97	Fluoride	0.063	I	mg F/L	P299768	
1774809	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P299676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.044		mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	5.4		mg C/L	P299515	
1774819	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 144 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: LAKE SIRENA WBID 1932C

Collection Date/Time: 02/25/2016 10:10

Field ID: LAKE SIRENA @ NORTH SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774800	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P299647	
		Sulfate	24		mg SO4/L	P299649	
	SM 2120 B	Color (true)	6.3		PCU	P299362	
	SM 2320 B-97	Total Alkalinity	8.4		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	81		mg/L	P299884	
	SM 2540 D-97	TSS	2	I	mg/L	P299787	
1774810	SM 4500 F-C-97	Fluoride	0.063	I	mg F/L	P299768	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P299676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.042		mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P299742	
1774820	SM 5310 B-00	Organic Carbon	5.4		mg C/L	P299515	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 144 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: LAKE SIRENA WBID 1932C

Collection Date/Time: 02/25/2016 10:50

Field ID: LAKE SIRENA @ WEST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774801	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P299647	
		Sulfate	24		mg SO4/L	P299649	

Field ID: LAKE SIRENA @ WEST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774801	SM 2120 B	Color (true)	6.0	I	PCU	P299363	
	SM 2320 B-97	Total Alkalinity	8.6		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	88		mg/L	P299884	
	SM 2540 D-97	TSS	2	U	mg/L	P299787	
	SM 4500 F-C-97	Fluoride	0.063	I	mg F/L	P299768	
1774811	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P299676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	5.5		mg C/L	P299515	
1774821	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 144 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: PEARL LAKE WBID 1932D

Collection Date/Time: 02/25/2016 09:35

Field ID: PEARL LAKE @ NORTH SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774802	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	16	A	mg Cl/L	P299647	
		Sulfate	17	A	mg SO4/L	P299649	
	SM 2120 B	Color (true)	12		PCU	P299363	
	SM 2320 B-97	Total Alkalinity	4.2		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	70		mg/L	P299885	
	SM 2540 D-97	TSS	2	I	mg/L	P299788	
	SM 4500 F-C-97	Fluoride	0.043	I	mg F/L	P299768	
1774812	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37		mg N/L	P299724	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P299515	
1774822	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 109 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: PEARL LAKE WBID 1932D

Collection Date/Time: 02/25/2016 08:50

Field ID: PEARL LAKE @ EAST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774803	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P299647	
		Sulfate	17		mg SO4/L	P299649	
	SM 2120 B	Color (true)	11		PCU	P299363	
	SM 2320 B-97	Total Alkalinity	4.3		mg CaCO3/L	P300007	

Field ID: PEARL LAKE @ EAST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774803	SM 2540 C-97	TDS	71		mg/L	P299885	
	SM 2540 D-97	TSS	2	U	mg/L	P299788	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P299768	
1774813	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P299724	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	6.0		mg C/L	P299515	
1774823	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 109 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: PEARL LAKE WBID 1932D

Collection Date/Time: 02/25/2016 09:10

Field ID: PEARL LAKE @ SOUTH SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774804	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P299405	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P299647	
		Sulfate	17		mg SO4/L	P299649	
	SM 2120 B	Color (true)	11		PCU	P299363	
	SM 2320 B-97	Total Alkalinity	4.2		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	74		mg/L	P299885	
	SM 2540 D-97	TSS	2	I	mg/L	P299788	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P299768	
1774814	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P299724	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P299742	
	SM 5310 B-00	Organic Carbon	5.8		mg C/L	P299515	
1774824	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 110 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: PEARL LAKE WBID 1932D

Collection Date/Time: 02/25/2016 09:45

Field ID: PEARL LAKE @ WEST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774805	EPA 180.1 Rev. 2.0	Turbidity	1.5	A	NTU	P299406	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P299647	
		Sulfate	17		mg SO4/L	P299649	
	SM 2120 B	Color (true)	11		PCU	P299363	
	SM 2320 B-97	Total Alkalinity	4.1		mg CaCO3/L	P300007	
	SM 2540 C-97	TDS	59		mg/L	P299885	
	SM 2540 D-97	TSS	2	I	mg/L	P299788	

Field ID: PEARL LAKE @ WEST SIDE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774805	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P299768	
1774815	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P299725	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P299743	
	SM 5310 B-00	Organic Carbon	6.0		mg C/L	P299515	
1774825	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299372	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 110 umhos/cm.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: PEARL LAKE WBID 1932D

Collection Date/Time: 02/25/2016 09:20

Field ID: PEARL LAKE @ CENTER

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1774806	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P299406	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P299647	
		Sulfate	17		mg SO4/L	P299649	
	SM 2120 B	Color (true)	11	A	PCU	P299363	
	SM 2320 B-97	Total Alkalinity	4.6		mg CaCO3/L	P299825	
	SM 2540 C-97	TDS	66		mg/L	P299885	
	SM 2540 D-97	TSS	2	I	mg/L	P299788	
	SM 4500 F-C-97	Fluoride	0.044	I	mg F/L	P299768	
1774816	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P300068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P299725	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P299707	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P299743	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P299515	
1774826	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P299373	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 110 umhos/cm.

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: P299405

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P299406

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: P299647

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299649

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300067

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300068

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299676

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299724

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299725

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299707

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299742

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: P299743

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299372

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299373

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

Reference Method: SM 2120 B
Batch ID: P299362

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P299363

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P299825

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

Reference Method: SM 2320 B-97
Batch ID: P300007

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

Reference Method: SM 2540 C-97
Batch ID: P299884

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P299885

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P299787

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P299788

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P299768

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P299515

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: P299647

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299649

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300067

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300068

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299676

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: P299676

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	91.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299725

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299707

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: P299742

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299743

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299372

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: P299373

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

Reference Method: SM 2320 B-97
Batch ID: P299825

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P300007

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

Reference Method: SM 4500 F-C-97
Batch ID: P299768

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.9		P	94 - 108

Reference Method: SM 5310 B-00
Batch ID: P299515

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774802	Chloride	104		P	90 - 110
1774803	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774802	Sulfate	99.8		P	90 - 110
1774803	Sulfate	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774789	Ammonia-N	99.7	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300068

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774814	Ammonia-N	99.3	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299676

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774756	Kjeldahl Nitrogen	104	98.9	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774812	Kjeldahl Nitrogen	93.8	99.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774815	Kjeldahl Nitrogen	92.5	93.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299707

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774807	NO2NO3-N	102	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299742

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774781	Total-P	104	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774815	Total-P	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299372

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774817	O-Phosphate-P	99.1	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774826	O-Phosphate-P	100	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P299768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774946	Fluoride	96.3	96.8	P/P	94 - 107

Reference Method: SM 5310 B-00
Batch ID: P299515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1774771	Organic Carbon	96.2	96.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P299405

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774780	Turbidity	3.56	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P299406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774805	Turbidity	3.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774802	Chloride	0.0669	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P299649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774802	Sulfate	1.09	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774789	Ammonia-N	1.02	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P300068

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774814	Ammonia-N	0.190	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299676

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774756	Kjeldahl Nitrogen	5.04	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774812	Kjeldahl Nitrogen	4.53	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P299725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774815	Kjeldahl Nitrogen	0.895	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P299707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774807	NO2NO3-N	2.42	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299742

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774781	Total-P	2.81	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P299743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774815	Total-P	0.234	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299372

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774817	O-Phosphate-P	0.503	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P299373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774826	O-Phosphate-P	1.19	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P299362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774788	Color (true)	4.46	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P299363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774806	Color (true)	2.33	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P299825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774946	Total Alkalinity	1.04	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P300007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774788	Total Alkalinity	1.03	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P299884

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774788	TDS	4.59	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P299885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774945	TDS	3.88	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P299768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774946	Fluoride	0.492	Spike	P	0 - 3.7

Reference Method: SM 5310 B-00
Batch ID: P299515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1774771	Organic Carbon	0.250	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: A67865

Included Lab Sample IDs: 1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	93.4	94.7	P/P	85 - 115
Color (true)	94.7	94.3	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A67867

Included Lab Sample IDs: 1774817, 1774818, 1774819, 1774820, 1774821, 1774822, 1774823, 1774824, 1774825, 1774826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	99.1	P/P	90 - 110
O-Phosphate-P	99.1	97.7	P/P	90 - 110
O-Phosphate-P	99.4	98.4	P/P	90 - 110
O-Phosphate-P	99.4	99.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A67879

Included Lab Sample IDs: 1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806

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

Reference Method: SM 5310 B-00

Run ID: A67917

Included Lab Sample IDs: 1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	95.9	P/P	90 - 110
Organic Carbon	96.2	95.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A67933

Included Lab Sample IDs: 1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	101	101	P/P	90 - 110
Chloride	99.4	101	P/P	90 - 110
Sulfate	96.3	100	P/P	90 - 110
Sulfate	98.6	99.5	P/P	90 - 110
Sulfate	99.5	96.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A67984

Included Lab Sample IDs: 1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816

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

Reference Method: SM 4500 F-C-97

Run ID: A68004

Included Lab Sample IDs: 1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.5	P/P	90 - 110
Fluoride	99.5	99.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97
Run ID: A68022
Included Lab Sample IDs: 1774806

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.3	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A68042
Included Lab Sample IDs: 1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A68075
Included Lab Sample IDs: 1774807, 1774808, 1774809, 1774810, 1774811

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

Reference Method: SM 2320 B-97
Run ID: A68093
Included Lab Sample IDs: 1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.1	101	P/P	90 - 110
Total Alkalinity	99.7	98.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A68112
Included Lab Sample IDs: 1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.7	P/P	90 - 110
Ammonia-N	99.7	99.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A68114
Included Lab Sample IDs: 1774812, 1774813, 1774814, 1774815, 1774816

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.0	91.1	P/P	90 - 110
Kjeldahl Nitrogen	91.1	94.3	P/P	90 - 110
Kjeldahl Nitrogen	94.3	94.4	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				3.56	
	Turbidity				3.34	
EPA 300.0 Rev. 2.1	Chloride	103	104	103	0.0669	
	Sulfate	99.6	99.8	99.4	1.09	
EPA 350.1 Rev. 2.0	Ammonia-N	97.7	99.7	98.6		1.02
	Ammonia-N	101	99.3	99.1		0.190
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.2	104	98.9		5.04
	Kjeldahl Nitrogen	91.4	93.8	99.6		4.53
	Kjeldahl Nitrogen	93.7	92.5	93.7		0.895
EPA 353.2 Rev. 2.0	NO2NO3-N	104	102	105		2.42
EPA 365.1 Rev. 2.0	Total-P	99.6	104	100		2.81
	Total-P	101	103	103		0.234
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	99.1	99.6		0.503
	O-Phosphate-P	103	100	101		1.19
SM 2120 B	Color (true)				4.46	
	Color (true)				2.33	
SM 2320 B-97	Total Alkalinity	101			1.04	
	Total Alkalinity	102			1.03	
SM 2540 C-97	TDS				4.59	
	TDS				3.88	
SM 4500 F-C-97	Fluoride	95.9	96.3	96.8		0.492
SM 5310 B-00	Organic Carbon	96.9	96.2	96.0		0.250

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1774817, 1774818, 1774819, 1774820, 1774821, 1774822, 1774823, 1774824, 1774825, 1774826
SM 2120 B / E31780	True Color measured at 450 nm	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816

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	02/26/2016			02/26/2016 14:01	Blanca Fach	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
EPA 300.0 Rev. 2.1	02/26/2016			03/02/2016	Ping Hua	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
EPA 350.1 Rev. 2.0	02/26/2016			03/09/2016	Diana M. Turner	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 351.2 Rev. 2.0	02/26/2016	03/03/2016	Sofia Elnemr	03/08/2016	Rochelle Y Jackson	1774807, 1774808, 1774809, 1774810, 1774811
	02/26/2016	03/04/2016	Christopher Armour	03/08/2016	Rochelle Y Jackson	1774812, 1774813, 1774814, 1774815, 1774816
EPA 353.2 Rev. 2.0	02/26/2016			03/03/2016	Peter D. Kaus	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 365.1 Rev. 2.0	02/26/2016	03/04/2016	Christopher Armour	03/07/2016	Lipi Saha	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816
EPA 365.1 Rev. 2.0 dissolved	02/26/2016			02/26/2016 14:29	Ping Hua	1774817
	02/26/2016			02/26/2016 14:34	Ping Hua	1774826
	02/26/2016			02/26/2016 14:45	Ping Hua	1774818
	02/26/2016			02/26/2016 14:46	Ping Hua	1774819
	02/26/2016			02/26/2016 14:47	Ping Hua	1774820
	02/26/2016			02/26/2016 14:48	Ping Hua	1774822
	02/26/2016			02/26/2016 14:53	Ping Hua	1774823
	02/26/2016			02/26/2016 14:54	Ping Hua	1774824
	02/26/2016			02/26/2016 14:55	Ping Hua	1774825
	02/26/2016			02/26/2016 15:08	Ping Hua	1774821
SM 2120 B	02/26/2016			02/26/2016 13:12	Rochelle Y Jackson	1774797
	02/26/2016			02/26/2016 13:13	Rochelle Y Jackson	1774798
	02/26/2016			02/26/2016 13:14	Rochelle Y Jackson	1774799
	02/26/2016			02/26/2016 13:15	Rochelle Y Jackson	1774800
	02/26/2016			02/26/2016 13:18	Rochelle Y Jackson	1774801, 1774802
	02/26/2016			02/26/2016 13:19	Rochelle Y Jackson	1774803
	02/26/2016			02/26/2016 13:20	Rochelle Y Jackson	1774804
	02/26/2016			02/26/2016 13:21	Rochelle Y Jackson	1774805
	02/26/2016			02/26/2016 13:22	Rochelle Y Jackson	1774806
SM 2320 B-97	02/26/2016			03/05/2016	Dale L. Simmons	1774806
	02/26/2016			03/07/2016	Dale L. Simmons	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 C-97	02/26/2016			03/02/2016	Yijie Li	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 2540 D-97	02/26/2016			03/02/2016	Yijie Li	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 4500 F-C-97	02/26/2016			03/04/2016	Dale L. Simmons	1774797, 1774798, 1774799, 1774800, 1774801, 1774802, 1774803, 1774804, 1774805, 1774806
SM 5310 B-00	02/26/2016			03/01/2016	Sofia Elnemr	1774807, 1774808, 1774809, 1774810, 1774811, 1774812, 1774813, 1774814, 1774815, 1774816