

Chemical Analysis Report

SO-DIST-2016-02-02-02

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-2016-01-25-69**
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

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 22-FEB-2016 16:55

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Nutrients.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Buck Lake @ North Side

Collection Date/Time: 02/01/2016 10:40

Field ID: G4SD020116-5

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767985	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P298182	
		Sulfate	70		mg SO4/L	P298179	
	SM 2120 B	Color (true)	9.3	A	PCU	P297986	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	212	A	mg/L	P298620	
	SM 2540 D-97	TSS	3	I	mg/L	P298549	
	SM 4500 F-C-97	Fluoride	0.072	I	mg F/L	P298258	
1767995	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P298272	
	EPA 353.2 Rev. 2.0	NO2NO3-N	11		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	4.4		mg C/L	P298152	
1768005	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297949	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Buck Lake @ South Side

Collection Date/Time: 02/01/2016 10:50

Field ID: G4SD020116-6

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767986	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P298182	
		Sulfate	65		mg SO4/L	P298179	
	SM 2120 B	Color (true)	17		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	15	A	mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	169		mg/L	P298620	
	SM 2540 D-97	TSS	2	I	mg/L	P298549	
	SM 4500 F-C-97	Fluoride	0.068	I	mg F/L	P298258	
1767996	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P298272	
	EPA 353.2 Rev. 2.0	NO2NO3-N	11		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	5.2		mg C/L	P298152	
1768006	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297949	

Ref. Method and Comment:

SM 2540 C-97: The reported result is consistent with the laboratory conductivity, 347 umhos/cm.

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

EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Lake Lachard @ Center

Collection Date/Time: 02/01/2016 11:50

Field ID: G4SD020116-7

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767987	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P297977	

Field ID: G4SD020116-7

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767987	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P298182	
		Sulfate	16		mg SO4/L	P298179	
	SM 2120 B	Color (true)	10		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	40		mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	74		mg/L	P298620	
	SM 2540 D-97	TSS	4	I	mg/L	P298549	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P298258	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.074		mg N/L	P298497	
1767997	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P298134	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	4.6		mg C/L	P298153	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Blue Lake @ Northside

Collection Date/Time: 02/01/2016 13:50

Field ID: G4SD020116-8

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767988	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P298182	
		Sulfate	24		mg SO4/L	P298179	
	SM 2120 B	Color (true)	12		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	76		mg/L	P298620	
	SM 2540 D-97	TSS	2	I	mg/L	P298549	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
1767998	EPA 350.1 Rev. 2.0	Ammonia-N	0.072		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P298134	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	6.6		mg C/L	P298153	
1768008	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Blue Lake @ SW Side

Collection Date/Time: 02/01/2016 13:40

Field ID: G4SD020116-9

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767989	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P298182	
		Sulfate	24		mg SO4/L	P298179	
	SM 2120 B	Color (true)	12		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P298263	

Field ID: G4SD020116-9

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767989	SM 2540 C-97	TDS	72		mg/L	P298620	
	SM 2540 D-97	TSS	2	I	mg/L	P298549	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
1767999	EPA 350.1 Rev. 2.0	Ammonia-N	0.068		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P298134	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P298153	
1768009	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Blue Lake @ SE Side

Collection Date/Time: 02/01/2016 13:30

Field ID: G4SD020116-10

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767990	EPA 180.1 Rev. 2.0	Turbidity	1.8	A	NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	18	A	mg Cl/L	P298181	
		Sulfate	24	A	mg SO4/L	P298178	
	SM 2120 B	Color (true)	12		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	87		mg/L	P298621	
	SM 2540 D-97	TSS	2	I	mg/L	P298550	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
1768000	EPA 350.1 Rev. 2.0	Ammonia-N	0.073		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P298134	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	6.7		mg C/L	P298153	
1768010	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Silver Lake @ North

Collection Date/Time: 02/01/2016 15:00

Field ID: G4SD020116-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767991	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	7.2		mg Cl/L	P298182	
		Sulfate	5.9		mg SO4/L	P298179	
	SM 2120 B	Color (true)	12		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	26		mg/L	P298621	
	SM 2540 D-97	TSS	2	I	mg/L	P298550	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
1768001	EPA 350.1 Rev. 2.0	Ammonia-N	0.042		mg N/L	P298497	

Field ID: G4SD020116-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1768001	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P298135	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	5.8		mg C/L	P298153	
1768011	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Silver Lake @ West

Collection Date/Time: 02/01/2016 15:15

Field ID: G4SD020116-2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767992	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	7.1		mg Cl/L	P298182	
		Sulfate	5.8		mg SO4/L	P298179	
	SM 2120 B	Color (true)	11		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	0.71	I	mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	28		mg/L	P298621	
	SM 2540 D-97	TSS	2	U	mg/L	P298550	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
1768002	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.29		mg N/L	P298135	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P298242	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P298161	
	SM 5310 B-00	Organic Carbon	5.5		mg C/L	P298153	
1768012	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Silver Lake @ South

Collection Date/Time: 02/01/2016 15:23

Field ID: G4SD020116-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767993	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	7.5		mg Cl/L	P298182	
		Sulfate	6.3		mg SO4/L	P298179	
	SM 2120 B	Color (true)	10		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	36		mg/L	P298621	
	SM 2540 D-97	TSS	2	U	mg/L	P298550	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
1768003	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P298497	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35		mg N/L	P298135	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P298243	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P298165	
	SM 5310 B-00	Organic Carbon	5.1		mg C/L	P298153	

Field ID: G4SD020116-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1768013	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: Silver Lake @ East

Collection Date/Time: 02/01/2016 15:30

Field ID: G4SD020116-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1767994	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P297977	
	EPA 300.0 Rev. 2.1	Chloride	7.3		mg Cl/L	P298182	
		Sulfate	6.0		mg SO4/L	P298179	
	SM 2120 B	Color (true)	10		PCU	P297986	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P298263	
	SM 2540 C-97	TDS	32		mg/L	P298621	
	SM 2540 D-97	TSS	2	U	mg/L	P298550	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P298258	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P298498	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P298135	
1768004	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P298243	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P298165	
	SM 5310 B-00	Organic Carbon	5.2		mg C/L	P298153	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P297950	

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: P297977

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P298178

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P298179

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P298181

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298181

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298182

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298497

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298498

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298134

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298135

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298272

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298242

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298243

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298161

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298165

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297949

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297950

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

Reference Method: SM 2120 B
Batch ID: P297986

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P298263

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

Reference Method: SM 2540 C-97
Batch ID: P298620

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P298621

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P298549

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P298550

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P298258

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P298152

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

Reference Method: SM 5310 B-00
Batch ID: P298153

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: P298178

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298179

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298181

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298182

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298497

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298497

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298498

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: P298134

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298135

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.1		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298272

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298242

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298243

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298161

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298165

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 dissolved
Batch ID: P297949

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297950

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

Reference Method: SM 2320 B-97
Batch ID: P298263

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

Reference Method: SM 4500 F-C-97
Batch ID: P298258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	94 - 108

Reference Method: SM 5310 B-00
Batch ID: P298152

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.5		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P298153

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298178

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767990	Sulfate	102		P	90 - 110
1768038	Sulfate	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298179

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767970	Sulfate	101		P	90 - 110
1767987	Sulfate	99.7		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298181

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767990	Chloride	104		P	90 - 110
1768038	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298182

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767970	Chloride	103		P	90 - 110
1767987	Chloride	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298497

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767996	Ammonia-N	101	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298498

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1768095	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298134

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767976	Kjeldahl Nitrogen	96.0	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298135

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1768001	Kjeldahl Nitrogen	99.2	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767979	NO2NO3-N	98.5	96.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298243

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1768040	NO2NO3-N	94.8	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767978	Total-P	103	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298165

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1768003	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297949

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767471	O-Phosphate-P	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1768007	O-Phosphate-P	104	105	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P298258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767986	Fluoride	97.1	98.3	P/P	94 - 107

Reference Method: SM 5310 B-00
Batch ID: P298152

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767873	Organic Carbon	97.1	96.3	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P298153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1767997	Organic Carbon	99.4	98.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P297977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767990	Turbidity	5.71	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767990	Sulfate	0.657	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767970	Sulfate	0.352	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298181

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767990	Chloride	0.825	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P298182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767970	Chloride	0.205	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767996	Ammonia-N	0.130	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P298498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1768095	Ammonia-N	0.867	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767976	Kjeldahl Nitrogen	1.90	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1768001	Kjeldahl Nitrogen	2.99	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P298272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1769060	Kjeldahl Nitrogen	4.98	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767979	NO2NO3-N	2.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P298243

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1768040	NO2NO3-N	0.990	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767978	Total-P	0.160	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P298165

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1768003	Total-P	1.51	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297949

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767471	O-Phosphate-P	0.817	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P297950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1768007	O-Phosphate-P	1.63	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P297986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767985	Color (true)	7.78	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P298263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767986	Total Alkalinity	2.46	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P298620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767985	TDS	4.24	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P298621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1768038	TDS	6.62	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P298258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767986	Fluoride	1.03	Spike	P	0 - 3.7

Reference Method: SM 5310 B-00
Batch ID: P298152

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767873	Organic Carbon	0.445	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P298153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1767997	Organic Carbon	0.903	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 365.1 Rev. 2.0 dissolved
Run ID: A67411

Included Lab Sample IDs: 1768005, 1768006, 1768007, 1768008, 1768009, 1768010, 1768011, 1768012, 1768013, 1768014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	97.1	P/P	90 - 110
O-Phosphate-P	99.3	98.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A67417

Included Lab Sample IDs: 1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A67423

Included Lab Sample IDs: 1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	103	P/P	90 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A67468

Included Lab Sample IDs: 1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	102	104	P/P	90 - 110
Chloride	102	102	P/P	90 - 110
Chloride	104	102	P/P	90 - 110
Sulfate	100	96.3	P/P	90 - 110
Sulfate	95.4	99.0	P/P	90 - 110
Sulfate	95.8	100	P/P	90 - 110
Sulfate	99.0	95.8	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A67475

Included Lab Sample IDs: 1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.1	99.6	P/P	90 - 110
Organic Carbon	99.6	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A67507

Included Lab Sample IDs: 1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A67511

Included Lab Sample IDs: 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.8	92.0	P/P	90 - 110
Kjeldahl Nitrogen	92.9	96.1	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A67514

Included Lab Sample IDs: 1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	98.6	P/P	90 - 110
Fluoride	99.1	99.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A67515

Included Lab Sample IDs: 1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	100	P/P	90 - 110
Total Alkalinity	99.9	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A67525

Included Lab Sample IDs: 1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.5	97.5	P/P	90 - 110
Total-P	97.5	96.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A67550

Included Lab Sample IDs: 1767995, 1767996

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	98.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A67582

Included Lab Sample IDs: 1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	102	P/P	90 - 110
Ammonia-N	102	103	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 SMP	MS
			LCS			
EPA 180.1 Rev. 2.0	Turbidity				5.71	
EPA 300.0 Rev. 2.1	Chloride	105	104	106	0.825	
	Chloride	103	103	104	0.205	
	Sulfate	100	102	104	0.657	
	Sulfate	98.8	101	99.7	0.352	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	101	101		0.130
	Ammonia-N	101	103	102		0.867
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.0	96.0	99.2		1.90
	Kjeldahl Nitrogen	98.1	99.2	103		2.99
	Kjeldahl Nitrogen	97.0				4.98
EPA 353.2 Rev. 2.0	NO2NO3-N	100	98.5	96.5		2.05
	NO2NO3-N	100	94.8	95.8		0.990
EPA 365.1 Rev. 2.0	Total-P	103	103	103		0.160
	Total-P	102	103	104		1.51
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	100	101		0.817

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	104	105		1.63
SM 2120 B	Color (true)				7.78	
SM 2320 B-97	Total Alkalinity	101			2.46	
SM 2540 C-97	TDS				4.24	
	TDS				6.62	
SM 4500 F-C-97	Fluoride	97.3	97.1	98.3		1.03
SM 5310 B-00	Organic Carbon	98.5	97.1	96.3		0.445
	Organic Carbon	100	99.4	98.3		0.903

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1768005, 1768006, 1768007, 1768008, 1768009, 1768010, 1768011, 1768012, 1768013, 1768014
SM 2120 B / E31780	True Color measured at 450 nm	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004

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	02/02/2016			02/02/2016 18:21	Blanca Fach	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
EPA 300.0 Rev. 2.1	02/02/2016			02/05/2016	Ping Hua	1767985, 1767986, 1767987, 1767988, 1767989, 1767991, 1767992, 1767993, 1767994
	02/02/2016			02/06/2016	Ping Hua	1767990
EPA 350.1 Rev. 2.0	02/02/2016			02/11/2016	Diana M. Turner	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 351.2 Rev. 2.0	02/02/2016	02/05/2016	Sofia Elnemr	02/08/2016	Bryan A. Werth	1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
	02/02/2016	02/09/2016	Christopher Armour	02/10/2016	Bryan A. Werth	1767995, 1767996
EPA 353.2 Rev. 2.0	02/02/2016			02/08/2016	Diana M. Turner	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 365.1 Rev. 2.0	02/02/2016	02/05/2016	Lipi Saha	02/08/2016	Lipi Saha	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004
EPA 365.1 Rev. 2.0 dissolved	02/02/2016			02/02/2016 15:16	Bryan A. Werth	1768005
	02/02/2016			02/02/2016 15:17	Bryan A. Werth	1768006
	02/02/2016			02/02/2016 15:19	Bryan A. Werth	1768007
	02/02/2016			02/02/2016 15:22	Bryan A. Werth	1768008
	02/02/2016			02/02/2016 15:27	Bryan A. Werth	1768009
	02/02/2016			02/02/2016 15:28	Bryan A. Werth	1768010
	02/02/2016			02/02/2016 15:29	Bryan A. Werth	1768011
	02/02/2016			02/02/2016 15:30	Bryan A. Werth	1768012
	02/02/2016			02/02/2016 15:31	Bryan A. Werth	1768013, 1768014
SM 2120 B	02/02/2016			02/03/2016 09:51	Rochelle Y Jackson	1767985
	02/02/2016			02/03/2016 09:52	Rochelle Y Jackson	1767986
	02/02/2016			02/03/2016 09:53	Rochelle Y Jackson	1767987
	02/02/2016			02/03/2016 09:54	Rochelle Y Jackson	1767988, 1767989
	02/02/2016			02/03/2016 09:55	Rochelle Y Jackson	1767990
	02/02/2016			02/03/2016 09:56	Rochelle Y Jackson	1767991
	02/02/2016			02/03/2016 09:57	Rochelle Y Jackson	1767992, 1767993
	02/02/2016			02/03/2016 09:58	Rochelle Y Jackson	1767994
SM 2320 B-97	02/02/2016			02/08/2016	Dale L. Simmons	1767986
	02/02/2016			02/09/2016	Dale L. Simmons	1767985, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 2540 C-97	02/02/2016			02/05/2016	Yijie Li	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 D-97	02/02/2016			02/05/2016	Yijie Li	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 4500 F-C-97	02/02/2016			02/08/2016	Dale L. Simmons	1767985, 1767986, 1767987, 1767988, 1767989, 1767990, 1767991, 1767992, 1767993, 1767994
SM 5310 B-00	02/02/2016			02/05/2016	Sofia Elnemr	1767995, 1767996, 1767997, 1767998, 1767999, 1768000, 1768001, 1768002, 1768003, 1768004