

Chemical Analysis Report

NW-DIST-2016-11-10-01

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

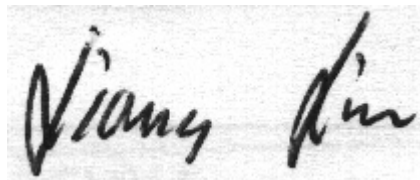
Event Description: **Eglin Run 468A 495 432 476 445 361**
Request ID: **RQ-2016-11-28-11**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government St
Suite 208A
Pensacola, FL 32502-5794
Attn: Michael King

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

Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-DEC-2016 10:15

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

NON-CONFORMANCE REPORT INCLUDED

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: Alaqua Creek above Bob Sikes Road

Collection Date/Time: 11/09/2016 11:25

Field ID: G3NW0108

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849042	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	1.9		mg Cl/L	P315506	
		Sulfate	1.1		mg SO4/L	P315505	
	SM 2120 B	Color (true)	16		PCU	P315007	
	SM 2320 B-97	Total Alkalinity	1.0	I	mg CaCO3/L	P315212	
	SM 2540 C-97	TDS	15	U	mg/L	P315777	
	SM 2540 D-97	TSS	2	U	mg/L	P315558	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315215	
1849051	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P315655	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.083		mg N/L	P315288	
	EPA 365.1 Rev. 2.0	Total-P	0.002	I	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	1.7		mg C/L	P315273	
1849060	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315013	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Alaqua Creek above Nelson Road

Collection Date/Time: 11/09/2016 12:00

Field ID: G3NW0106

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849043	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	2.0		mg Cl/L	P315506	
		Sulfate	1.1		mg SO4/L	P315505	
	SM 2120 B	Color (true)	21	A	PCU	P315008	
	SM 2320 B-97	Total Alkalinity	1.1	I	mg CaCO3/L	P315212	
	SM 2540 C-97	TDS	15	U	mg/L	P315777	
	SM 2540 D-97	TSS	2	I	mg/L	P315558	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315215	
1849052	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21		mg N/L	P315655	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.063		mg N/L	P315288	
	EPA 365.1 Rev. 2.0	Total-P	0.003	I	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	1.8		mg C/L	P315273	
1849061	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Rocky Creek @ 200/201

Collection Date/Time: 11/09/2016 13:00

Field ID: G3NW0059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849044	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P315005	

Field ID: G3NW0059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849044	EPA 300.0 Rev. 2.1	Chloride	2.1		mg Cl/L	P315506	
		Sulfate	0.59		mg SO4/L	P315505	
	SM 2120 B	Color (true)	9.9		PCU	P315008	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P315212	
	SM 2540 C-97	TDS	15	U	mg/L	P315777	
	SM 2540 D-97	TSS	2	I	mg/L	P315558	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315215	
1849053	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	I	mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P315288	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	1.4		mg C/L	P315273	
1849062	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Rocky Cr. @ Eglin 214/374

Collection Date/Time: 11/09/2016 13:20

Field ID: G3NW0060

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849045	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	1.9		mg Cl/L	P315506	
		Sulfate	0.66		mg SO4/L	P315505	
	SM 2120 B	Color (true)	10		PCU	P315008	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P315212	
	SM 2540 C-97	TDS	15	U	mg/L	P315777	
	SM 2540 D-97	TSS	3	I	mg/L	P315558	
1849054	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315215	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.086		mg N/L	P315288	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P315330	
1849063	SM 5310 B-00	Organic Carbon	1.3		mg C/L	P315273	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Open Branch Above ER214/374 C-72

Collection Date/Time: 11/09/2016 13:30

Field ID: G3NW0105

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849046	EPA 180.1 Rev. 2.0	Turbidity	0.65		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	1.6		mg Cl/L	P315506	
		Sulfate	0.45	I	mg SO4/L	P315505	

Field ID: G3NW0105

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849046	SM 2120 B	Color (true)	11		PCU	P315008	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P315212	
	SM 2540 C-97	TDS	15	U	mg/L	P315777	
	SM 2540 D-97	TSS	2	U	mg/L	P315558	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315215	
1849055	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21		mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.019		mg N/L	P315288	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	1.6		mg C/L	P315273	
1849064	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Little Rocky Creek abv Eglin Rd 200

Collection Date/Time: 11/09/2016 14:10

Field ID: G3NW0104

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849047	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	2.3		mg Cl/L	P315506	
		Sulfate	0.74		mg SO4/L	P315505	
	SM 2120 B	Color (true)	16		PCU	P315008	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P315335	
	SM 2540 C-97	TDS	15	U	mg/L	P315777	
	SM 2540 D-97	TSS	2	U	mg/L	P315558	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315337	
1849056	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	IY	mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.082	Y	mg N/L	P315289	
	EPA 365.1 Rev. 2.0	Total-P	0.002	UY	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	1.9	Y	mg C/L	P315273	
1849065	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: NO2NO3-N: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

SM 5310 B-00: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

Sample Location: Little Rocky Creek abv Eglin Rd 515

Collection Date/Time: 11/09/2016 14:40

Field ID: G3NW0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849048	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	2.4		mg Cl/L	P315506	

Field ID: G3NW0103

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849048	EPA 300.0 Rev. 2.1	Sulfate	0.77		mg SO4/L	P315505	
	SM 2120 B	Color (true)	16		PCU	P315008	
	SM 2320 B-97	Total Alkalinity	0.69	I	mg CaCO3/L	P315335	
	SM 2540 C-97	TDS	15	U	mg/L	P315778	
	SM 2540 D-97	TSS	2	U	mg/L	P315559	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315337	
1849057	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.082		mg N/L	P315289	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	2.0		mg C/L	P315273	
1849066	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Juniper Creek @ Hwy 85

Collection Date/Time: 11/09/2016 15:20

Field ID: G3NW0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849049	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	2.5		mg Cl/L	P315509	
		Sulfate	0.66		mg SO4/L	P315502	
	SM 2120 B	Color (true)	14		PCU	P315008	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P315335	
	SM 2540 C-97	TDS	15	U	mg/L	P315778	
	SM 2540 D-97	TSS	2	U	mg/L	P315559	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315337	
1849058	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	I	mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.074		mg N/L	P315289	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P315330	
	SM 5310 B-00	Organic Carbon	1.9		mg C/L	P315273	
1849067	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Turkey Creek abv Eglin Rd. 232

Collection Date/Time: 11/09/2016 15:30

Field ID: G3NW0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849050	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P315005	
	EPA 300.0 Rev. 2.1	Chloride	2.7		mg Cl/L	P315509	
		Sulfate	0.50	I	mg SO4/L	P315502	
	SM 2120 B	Color (true)	7.9		PCU	P315008	

Field ID: G3NW0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1849050	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P315335	
	SM 2540 C-97	TDS	15	U	mg/L	P315778	
	SM 2540 D-97	TSS	2	I	mg/L	P315559	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P315337	
1849059	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P315187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P315656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P315289	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P315332	
	SM 5310 B-00	Organic Carbon	1.4		mg C/L	P315273	
1849068	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P315014	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Non-Conformance Report

NCR ID: 6113

Event(s)

NW-DIST-2016-11-10-01

Job(s)

TLH-2016-11-10-30

Sample(s)

1849056

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Sample 1849056 not preserved to pH<2.

Resolution: Sample 1849056 preserved in lab with Sulfuric Acid on 11/10/2016 @ 11:55am

Authorised by/Date: Ramsey K. White 12/5/2016

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry Colin Wright (850) 245-8085
Biology Cheryl Swanson (850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P315005

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P315502

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P315505

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: P315506

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315509

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315187

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315655

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315656

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315288

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315289

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315330

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315332

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 dissolved
Batch ID: P315013

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P315014

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

Reference Method: SM 2120 B
Batch ID: P315007

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P315008

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P315212

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

Reference Method: SM 2320 B-97
Batch ID: P315335

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

Reference Method: SM 2540 C-97
Batch ID: P315777

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P315778

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P315558

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P315559

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P315215

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P315337

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P315273

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: P315502

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315505

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315506

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315509

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315187

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: P315187

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	109		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315656

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315288

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: P315289

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: P315330

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315332

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: P315013

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: P315014

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P315212

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 2320 B-97
Batch ID: P315335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P315215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P315337

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.4		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P315273

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1847117	Sulfate	94.4		P	90 - 110
1848093	Sulfate	95.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1848920	Chloride	100		P	90 - 110
1848922	Chloride	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1847117	Chloride	102		P	90 - 110
1848093	Chloride	101		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849051	Ammonia-N	107	109	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315655

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1848923	Kjeldahl Nitrogen	105	113	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849053	Kjeldahl Nitrogen	97.4	94.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1848916	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315289

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849056	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1848936	Total-P	96.7	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315332

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849090	Total-P	100	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P315013

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1848864	O-Phosphate-P	99.3	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P315014

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849061	O-Phosphate-P	101	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P315215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849087	Fluoride	97.1	98.9	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P315337

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849597	Fluoride	95.2	96.3	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P315273

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1849051	Organic Carbon	97.7	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P315005

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848945	Turbidity	5.61	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848920	Sulfate	0.0570	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848920	Chloride	0.0275	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P315509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1847117	Chloride	0.0198	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P315187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849051	Ammonia-N	1.10	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848923	Kjeldahl Nitrogen	4.24	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P315656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849053	Kjeldahl Nitrogen	2.99	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848916	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P315289

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849056	NO2NO3-N	0.345	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848936	Total-P	0.0237	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P315332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849090	Total-P	3.42	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P315013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848864	O-Phosphate-P	0.312	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P315014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849061	O-Phosphate-P	1.96	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P315007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848859	Color (true)	1.79	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P315008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849043	Color (true)	0.947	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P315212

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849087	Total Alkalinity	0.0687	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P315335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849597	Total Alkalinity	0.101	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P315777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1848915	TDS	1.60	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P315778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849088	TDS	1.39	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P315215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849087	Fluoride	1.56	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P315337

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849597	Fluoride	1.00	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P315273

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1849051	Organic Carbon	0.470	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: A72761
Included Lab Sample IDs: 1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050

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

Reference Method: SM 2120 B
Run ID: A72762
Included Lab Sample IDs: 1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A72763
Included Lab Sample IDs: 1849060, 1849061, 1849062, 1849063, 1849064, 1849065, 1849066, 1849067, 1849068

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	100	98.8	P/P	90 - 110
O-Phosphate-P	98.8	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A72814
Included Lab Sample IDs: 1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

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

Reference Method: SM 2320 B-97
Run ID: A72821
Included Lab Sample IDs: 1849042, 1849043, 1849044, 1849045, 1849046

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	102	P/P	90 - 110
Total Alkalinity	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A72821

Included Lab Sample IDs: 1849042, 1849043, 1849044, 1849045, 1849046

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A72830

Included Lab Sample IDs: 1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	103	P/P	90 - 110
Chloride	101	101	P/P	90 - 110
Chloride	103	99.0	P/P	90 - 110
Chloride	99.0	99.2	P/P	90 - 110
Sulfate	101	96.1	P/P	90 - 110
Sulfate	96.1	96.9	P/P	90 - 110
Sulfate	97.6	100	P/P	90 - 110
Sulfate	98.7	97.6	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A72839

Included Lab Sample IDs: 1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.4	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A72842

Included Lab Sample IDs: 1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

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

Reference Method: SM 2320 B-97

Run ID: A72857

Included Lab Sample IDs: 1849047, 1849048, 1849049, 1849050

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

Reference Method: SM 4500 F-C-97

Run ID: A72857

Included Lab Sample IDs: 1849047, 1849048, 1849049, 1849050

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A72933

Included Lab Sample IDs: 1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A72933

Included Lab Sample IDs: 1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110
Total-P	101	102	P/P	90 - 110
Total-P	104	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A73052

Included Lab Sample IDs: 1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	96.1	P/P	90 - 110
Kjeldahl Nitrogen	94.8	100	P/P	90 - 110
Kjeldahl Nitrogen	96.1	97.6	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				5.61	
EPA 300.0 Rev. 2.1	Chloride	101	100	99.3	0.0275	
	Chloride	103	102	101	0.0198	
	Sulfate	99.0	94.4	95.0		
	Sulfate	99.0			0.0570	
EPA 350.1 Rev. 2.0	Ammonia-N	109	107	109		1.10
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	105	113		4.24
	Kjeldahl Nitrogen	106	97.4	94.1		2.99
EPA 353.2 Rev. 2.0	NO2NO3-N	104	102	102		0.0
	NO2NO3-N	104	104	103		0.345
EPA 365.1 Rev. 2.0	Total-P	96.4	96.7	96.7		0.0237
	Total-P	101	100	96.4		3.42
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	99.3	99.7		0.312
	O-Phosphate-P	104	101	103		1.96
SM 2120 B	Color (true)				1.79	
	Color (true)				0.947	
SM 2320 B-97	Total Alkalinity	101			0.0687	
	Total Alkalinity	101			0.101	
SM 2540 C-97	TDS				1.60	
	TDS				1.39	
SM 4500 F-C-97	Fluoride	97.1	97.1	98.9		1.56
	Fluoride	97.4	95.2	96.3		1.00
SM 5310 B-00	Organic Carbon	97.8	97.7	98.2		0.470

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
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Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1849060, 1849061, 1849062, 1849063, 1849064, 1849065, 1849066, 1849067, 1849068
SM 2120 B / E31780	True Color measured at 450 nm	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	11/10/2016			11/10/2016 14:16	Sima Feizi	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
EPA 300.0 Rev. 2.1	11/10/2016			11/18/2016	Ping Hua	1849049, 1849050
	11/10/2016			11/19/2016	Ping Hua	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048
EPA 350.1 Rev. 2.0	11/10/2016			11/15/2016	Julie Michelle Frank	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 351.2 Rev. 2.0	11/10/2016	11/23/2016	Adrian Shelby	11/29/2016	Joseph Suarez	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 353.2 Rev. 2.0	11/10/2016			11/16/2016	Beverly Y. Sanders	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 365.1 Rev. 2.0	11/10/2016	11/17/2016	Christopher Armour	11/21/2016	Lipi Saha	1849051, 1849052, 1849053, 1849054, 1849055, 1849056, 1849057, 1849058, 1849059
EPA 365.1 Rev. 2.0 dissolved	11/10/2016			11/10/2016 14:57	Julia Storbeck	1849061
	11/10/2016			11/10/2016 15:48	Julia Storbeck	1849060
	11/10/2016			11/10/2016 15:49	Julia Storbeck	1849062
	11/10/2016			11/10/2016 15:54	Julia Storbeck	1849063
	11/10/2016			11/10/2016 15:55	Julia Storbeck	1849064
	11/10/2016			11/10/2016 15:56	Julia Storbeck	1849065
	11/10/2016			11/10/2016 15:57	Julia Storbeck	1849066
	11/10/2016			11/10/2016 15:58	Julia Storbeck	1849067
	11/10/2016			11/10/2016 15:59	Julia Storbeck	1849068
SM 2120 B	11/10/2016			11/10/2016 15:04	Jared I. Manley	1849042
	11/10/2016			11/10/2016 15:08	Jared I. Manley	1849043
	11/10/2016			11/10/2016 15:09	Jared I. Manley	1849044, 1849045
	11/10/2016			11/10/2016 15:10	Jared I. Manley	1849046
	11/10/2016			11/10/2016 15:11	Jared I. Manley	1849047
	11/10/2016			11/10/2016 15:12	Jared I. Manley	1849048, 1849049
	11/10/2016			11/10/2016 15:13	Jared I. Manley	1849050
SM 2320 B-97	11/10/2016			11/16/2016	Dale L. Simmons	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 2540 C-97	11/10/2016			11/14/2016	Sima Feizi	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 2540 D-97	11/10/2016			11/14/2016	Sima Feizi	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-97	11/10/2016			11/16/2016	Dale L. Simmons	1849042, 1849043, 1849044, 1849045, 1849046, 1849047, 1849048, 1849049, 1849050
SM 5310 B-00	11/10/2016			11/15/2016	Julie Michelle Frank	1849051, 1849052, 1849053
	11/10/2016			11/16/2016	Julie Michelle Frank	1849054, 1849055, 1849056, 1849057, 1849058, 1849059