

Chemical Analysis Report

NW-DIST-2016-04-06-02

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

Event Description: **WBID 872A,531,624,291,494,542,489A,586**

Request ID: **RQ-2016-03-07-70**

Customer: **NW-DIST**

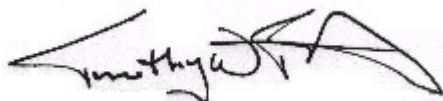
Project ID: **SMP**

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Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 25-APR-2016 16:42

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: BIG HORSE CREEK HWY 2

Collection Date/Time: 04/05/2016 11:05

Field ID: G4NW0299

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786933	EPA 180.1 Rev. 2.0	Turbidity	7.1		NTU	P301753	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P301955	
		Sulfate	1.3		mg SO4/L	P301957	
	SM 2120 B	Color (true)	35		PCU	P301739	
	SM 2320 B-97	Total Alkalinity	2.3	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	29		mg/L	P302480	
	SM 2540 D-97	TSS	12		mg/L	P302395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301983	
1786942	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P302270	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.21		mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P302011	
	EPA 365.1 Rev. 2.0	Total-P	0.021		mg P/L	P302144	
	SM 5310 B-00	Organic Carbon	3.0		mg C/L	P301989	
1786951	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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

Sample Location: BIG HORSE CREEK OLD RIVER RD.

Collection Date/Time: 04/05/2016 11:25

Field ID: G4NW0298

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786934	EPA 180.1 Rev. 2.0	Turbidity	8.0		NTU	P301753	
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P301956	
		Sulfate	1.1		mg SO4/L	P301958	
	SM 2120 B	Color (true)	51		PCU	P301739	
	SM 2320 B-97	Total Alkalinity	2.1	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	27		mg/L	P302480	
	SM 2540 D-97	TSS	12		mg/L	P302395	
	SM 4500 F-C-97	Fluoride	0.036	I	mg F/L	P301983	
1786943	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P302270	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.058		mg N/L	P302011	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P302144	
	SM 5310 B-00	Organic Carbon	4.0		mg C/L	P301989	
1786952	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P301717	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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

Sample Location: PANTHER CREEK SHERMAN KENNEDY RD.

Collection Date/Time: 04/05/2016 12:15

Field ID: G4NW0295

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786935	EPA 180.1 Rev. 2.0	Turbidity	8.4		NTU	P301753	

Field ID: G4NW0295

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786935	EPA 300.0 Rev. 2.1	Chloride	2.7		mg Cl/L	P301956	
		Sulfate	1.2		mg SO4/L	P301958	
	SM 2120 B	Color (true)	47		PCU	P301739	
	SM 2320 B-97	Total Alkalinity	0.97	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	18	I	mg/L	P302480	
	SM 2540 D-97	TSS	7	I	mg/L	P302395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
1786944	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P302270	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.086		mg N/L	P302011	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P302144	
	SM 5310 B-00	Organic Carbon	4.0		mg C/L	P301989	
1786953	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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

Sample Location: PANTHER CREEK JOHN RILEY BARNHILL RD. Collection Date/Time: 04/05/2016 12:35

Field ID: G4NW0296

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786936	EPA 180.1 Rev. 2.0	Turbidity	9.8		NTU	P301753	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P301956	
		Sulfate	1.3		mg SO4/L	P301958	
	SM 2120 B	Color (true)	52		PCU	P301739	
	SM 2320 B-97	Total Alkalinity	0.80	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	23	I	mg/L	P302480	
	SM 2540 D-97	TSS	6	I	mg/L	P302395	
1786945	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P302271	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P302011	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P302144	
1786954	SM 5310 B-00	Organic Carbon	4.2		mg C/L	P301989	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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

Sample Location: PANTHER CREEK HIGH BRIDGE RD. Collection Date/Time: 04/05/2016 13:05

Field ID: G4NW0297

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786937	EPA 180.1 Rev. 2.0	Turbidity	10	A	NTU	P301754	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P301956	
		Sulfate	1.3		mg SO4/L	P301958	

Field ID: G4NW0297

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786937	SM 2120 B	Color (true)	65		PCU	P301739	
	SM 2320 B-97	Total Alkalinity	1.4	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	32		mg/L	P302480	
	SM 2540 D-97	TSS	10	I	mg/L	P302395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
1786946	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P302271	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.019		mg N/L	P302011	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P302144	
	SM 5310 B-00	Organic Carbon	4.9		mg C/L	P301989	
1786955	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

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

Sample Location: MARE CREEK MATTIE KENNEDY RD.

Collection Date/Time: 04/05/2016 13:40

Field ID: G4NW0353

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786938	EPA 180.1 Rev. 2.0	Turbidity	6.8		NTU	P301754	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P301956	
		Sulfate	1.3		mg SO4/L	P301958	
	SM 2120 B	Color (true)	51	A	PCU	P301749	
	SM 2320 B-97	Total Alkalinity	1.8	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	35		mg/L	P302480	
	SM 2540 D-97	TSS	5	I	mg/L	P302395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
1786947	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P302271	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.041		mg N/L	P302011	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P302144	
	SM 5310 B-00	Organic Carbon	3.8		mg C/L	P301989	
1786956	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

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: BAGGETT CREEK KEYSER MILL RD.

Collection Date/Time: 04/05/2016 14:15

Field ID: G4NW0335

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786939	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P301754	
	EPA 300.0 Rev. 2.1	Chloride	4.1		mg Cl/L	P301956	
		Sulfate	0.78		mg SO4/L	P301958	
	SM 2120 B	Color (true)	28		PCU	P301749	
	SM 2320 B-97	Total Alkalinity	3.1		mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	31		mg/L	P302480	

Field ID: G4NW0335

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786939	SM 2540 D-97	TSS	3	I	mg/L	P302395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
1786948	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P302271	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P302387	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.75		mg N/L	P302012	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P302145	
	SM 5310 B-00	Organic Carbon	2.3		mg C/L	P301989	
1786957	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

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: BAGGETT CREEK UPSTREAM OF HWY 90

Collection Date/Time: 04/05/2016 14:35

Field ID: G4NW0336

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786940	EPA 180.1 Rev. 2.0	Turbidity	6.0		NTU	P301754	
	EPA 300.0 Rev. 2.1	Chloride	3.5		mg Cl/L	P301956	
		Sulfate	1.0		mg SO4/L	P301958	
	SM 2120 B	Color (true)	48		PCU	P301749	
	SM 2320 B-97	Total Alkalinity	6.3		mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	20	I	mg/L	P302481	
	SM 2540 D-97	TSS	7	I	mg/L	P302396	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
1786949	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P302271	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P302388	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.45		mg N/L	P302012	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P302145	
	SM 5310 B-00	Organic Carbon	3.5		mg C/L	P301989	
1786958	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301717	

Sample Location: WILKINSON CREEK UPSTREAM OF WILKINSON BLUFF RD.

Collection Date/Time: 04/05/2016 14:55

Field ID: G4NW0357

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786941	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P301754	
	EPA 300.0 Rev. 2.1	Chloride	3.1		mg Cl/L	P301956	
		Sulfate	1.1		mg SO4/L	P301958	
	SM 2120 B	Color (true)	33		PCU	P301749	
	SM 2320 B-97	Total Alkalinity	1.0	I	mg CaCO3/L	P301981	
	SM 2540 C-97	TDS	29		mg/L	P302481	
	SM 2540 D-97	TSS	2	U	mg/L	P302396	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P301991	
1786950	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P302271	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P302388	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P302012	

Field ID: G4NW0357

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1786950	EPA 365.1 Rev. 2.0	Total-P	0.0066		mg P/L	P302145	
	SM 5310 B-00	Organic Carbon	2.2		mg C/L	P301989	
1786959	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P301718	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P301753

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P301754

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301955

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301956

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301957

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301958

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302270

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302271

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302387

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302388

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302011

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302012

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302144

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302145

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301717

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301718

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

Reference Method: SM 2120 B
Batch ID: P301739

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P301749

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P301981

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

Reference Method: SM 2540 C-97
Batch ID: P302480

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P302481

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302395

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P302396

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P301983

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P301991

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P301989

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: P301955

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301956

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301957

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301958

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302270

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302271

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: P302387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302388

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302011

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302012

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302144

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302145

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301717

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301718

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

Reference Method: SM 2320 B-97
Batch ID: P301981

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P301983

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P301991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P301989

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: P301955

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786870	Chloride	103		P	90 - 110
1786910	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301956

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1787002	Chloride	99.2		P	90 - 110
1787055	Chloride	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301957

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786870	Sulfate	102		P	90 - 110
1786910	Sulfate	109		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1787002	Sulfate	98.5		P	90 - 110
1787055	Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786943	Ammonia-N	98.4	99.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302271

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786971	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302387

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786945	Kjeldahl Nitrogen	98.4	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786949	Kjeldahl Nitrogen	107	99.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302011

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302011

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786944	NO2NO3-N	96.9	95.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302012

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1787004	NO2NO3-N	95.0	94.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786911	Total-P	98.6	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786948	Total-P	101	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301717

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786953	O-Phosphate-P	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301718

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1787005	O-Phosphate-P	100	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P301983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1787361	Fluoride	98.7	98.1	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P301991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1787001	Fluoride	98.7	98.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P301989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1786942	Organic Carbon	95.4	95.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P301753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786897	Turbidity	6.95	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P301754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786937	Turbidity	5.77	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301955

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786870	Chloride	0.283	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787002	Chloride	0.111	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786870	Sulfate	2.45	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P301958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787002	Sulfate	3.44	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786943	Ammonia-N	0.771	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P302271

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786971	Ammonia-N	1.04	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786945	Kjeldahl Nitrogen	5.51	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P302388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786949	Kjeldahl Nitrogen	5.82	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786944	NO2NO3-N	1.08	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P302012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787004	NO2NO3-N	1.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786911	Total-P	2.72	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P302145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786948	Total-P	4.24	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301717

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786953	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P301718

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787005	O-Phosphate-P	1.29	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P301749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786938	Color (true)	1.37	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P301981

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787001	Total Alkalinity	0.523	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P302480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786779	TDS	3.55	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P302481

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787002	TDS	5.08	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P302396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787002	TSS	8.00	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P301983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787361	Fluoride	0.470	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P301991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1787001	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P301989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1786942	Organic Carbon	0.0454	Spike	P	0 - 20

Quality Assurance Report Precision

* 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 300.0 Rev. 2.1

Run ID: A68637

Included Lab Sample IDs: 1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Sulfate	100	99.8	P/P	90 - 110
Sulfate	99.8	100	P/P	90 - 110
Sulfate	99.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A68691

Included Lab Sample IDs: 1786951, 1786952, 1786953, 1786954, 1786955, 1786956, 1786957, 1786958, 1786959

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	101	P/P	90 - 110
O-Phosphate-P	101	99.2	P/P	90 - 110
O-Phosphate-P	99.5	101	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A68699

Included Lab Sample IDs: 1786933, 1786934, 1786935, 1786936, 1786937

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	104	P/P	85 - 115

Reference Method: SM 2120 B

Run ID: A68703

Included Lab Sample IDs: 1786938, 1786939, 1786940, 1786941

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	102	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A68705

Included Lab Sample IDs: 1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105
Turbidity	99.0	100	P/P	95 - 105

Reference Method: SM 2320 B-97

Run ID: A68783

Included Lab Sample IDs: 1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A68783

Included Lab Sample IDs: 1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941

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

Reference Method: SM 5310 B-00

Run ID: A68790

Included Lab Sample IDs: 1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A68799

Included Lab Sample IDs: 1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	97.0	96.5	P/P	90 - 110
NO2NO3-N	97.0	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A68881

Included Lab Sample IDs: 1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	97.2	P/P	90 - 110
Total-P	97.2	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A68885

Included Lab Sample IDs: 1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A68945

Included Lab Sample IDs: 1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	99.6	P/P	90 - 110
Kjeldahl Nitrogen	99.6	98.7	P/P	90 - 110

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 180.1 Rev. 2.0	Turbidity				6.95	
	Turbidity				5.77	
EPA 300.0 Rev. 2.1	Chloride	103	103	104	0.283	
	Chloride	101	99.2	99.9	0.111	
	Sulfate	102	102	109	2.45	
	Sulfate	99.5	98.5	98.9	3.44	
EPA 350.1 Rev. 2.0	Ammonia-N	99.5	98.4	99.2		0.771
	Ammonia-N	101	101	103		1.04
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.4	98.4	105		5.51
	Kjeldahl Nitrogen	94.1	107	99.8		5.82
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	96.9	95.4		1.08
	NO2NO3-N	97.0	95.0	94.0		1.06
EPA 365.1 Rev. 2.0	Total-P	101	98.6	101		2.72
	Total-P	98.9	101	96.5		4.24
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	106	106		0.0
	O-Phosphate-P	102	100	102		1.29
SM 2120 B	Color (true)				1.37	
SM 2320 B-97	Total Alkalinity	104			0.523	
SM 2540 C-97	TDS				3.55	
	TDS				5.08	
SM 2540 D-97	TSS				8.00	
SM 4500 F-C-97	Fluoride	97.2	98.7	98.1		0.470
	Fluoride	100	98.7	98.7		0.0
SM 5310 B-00	Organic Carbon	100	95.4	95.4		0.0454

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1786951, 1786952, 1786953, 1786954, 1786955, 1786956, 1786957, 1786958, 1786959
SM 2120 B / E31780	True Color measured at 450 nm	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950

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	04/06/2016			04/06/2016 16:24	Sima Feizi	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
EPA 300.0 Rev. 2.1	04/06/2016			04/08/2016	Julia Storbeck	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939
	04/06/2016			04/09/2016	Julia Storbeck	1786940, 1786941
EPA 350.1 Rev. 2.0	04/06/2016			04/14/2016	Diana M. Turner	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 351.2 Rev. 2.0	04/06/2016	04/18/2016	Sofia Elnemr	04/19/2016	Rochelle Y Jackson	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 353.2 Rev. 2.0	04/06/2016			04/11/2016	Diana M. Turner	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 365.1 Rev. 2.0	04/06/2016	04/13/2016	Christopher Armour	04/14/2016	Lipi Saha	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950
EPA 365.1 Rev. 2.0 dissolved	04/06/2016			04/06/2016 13:53	Julia Storbeck	1786953
	04/06/2016			04/06/2016 14:48	Julia Storbeck	1786951
	04/06/2016			04/06/2016 14:49	Julia Storbeck	1786952
	04/06/2016			04/06/2016 14:50	Julia Storbeck	1786954
	04/06/2016			04/06/2016 14:55	Julia Storbeck	1786955
	04/06/2016			04/06/2016 14:56	Julia Storbeck	1786956
	04/06/2016			04/06/2016 14:57	Julia Storbeck	1786957
	04/06/2016			04/06/2016 14:58	Julia Storbeck	1786958
	04/06/2016			04/06/2016 14:59	Julia Storbeck	1786959
SM 2120 B	04/06/2016			04/06/2016 16:07	Blanca Fach	1786933
	04/06/2016			04/06/2016 16:08	Blanca Fach	1786934, 1786935
	04/06/2016			04/06/2016 16:09	Blanca Fach	1786936
	04/06/2016			04/06/2016 16:10	Blanca Fach	1786937
	04/06/2016			04/06/2016 17:37	Blanca Fach	1786938
	04/06/2016			04/06/2016 17:38	Blanca Fach	1786939
	04/06/2016			04/06/2016 17:39	Blanca Fach	1786940
	04/06/2016			04/06/2016 17:40	Blanca Fach	1786941
SM 2320 B-97	04/06/2016			04/09/2016	Dale L. Simmons	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 2540 C-97	04/06/2016			04/11/2016	Yijie Li	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 D-97	04/06/2016			04/11/2016	Yijie Li	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 4500 F-C-97	04/06/2016			04/09/2016	Dale L. Simmons	1786933, 1786934, 1786935, 1786936, 1786937, 1786938, 1786939, 1786940, 1786941
SM 5310 B-00	04/06/2016			04/09/2016	Sofia Elnemr	1786942, 1786943, 1786944, 1786945, 1786946, 1786947, 1786948, 1786949, 1786950