

Chemical Analysis Report

NW-DIST-2016-07-12-01

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

Event Description: **WBID 76 40A 101 35A 269**

Request ID: **RQ-2016-07-11-32**

Customer: **NW-DIST**

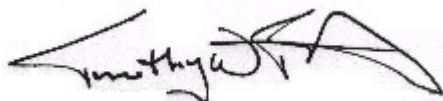
Project ID: **SMP**

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Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 05-AUG-2016 11:09



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: West Sandy Creek Abv CR183 NE of Defuniak **Collection Date/Time: 07/11/2016 11:10**

Field ID: G3NW0053

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814990	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P307792	
	EPA 300.0 Rev. 2.1	Chloride	3.6		mg Cl/L	P308872	
		Sulfate	1.6		mg SO4/L	P308873	
	SM 2120 B	Color (true)	71	A	PCU	P307748	
	SM 2320 B-97	Total Alkalinity	8.0		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	34		mg/L	P308582	
	SM 2540 D-97	TSS	4	I	mg/L	P308392	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
1814998	EPA 350.1 Rev. 2.0	Ammonia-N	0.052		mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.36		mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P307881	
	SM 5310 B-00	Organic Carbon	4.0		mg C/L	P308330	
1815006	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: West Sandy Creek Above Old Landfill Rd. **Collection Date/Time: 07/11/2016 11:40**

Field ID: G3NW0054

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814991	EPA 180.1 Rev. 2.0	Turbidity	7.0		NTU	P307792	
	EPA 300.0 Rev. 2.1	Chloride	3.1		mg Cl/L	P308872	
		Sulfate	1.8		mg SO4/L	P308873	
	SM 2120 B	Color (true)	110		PCU	P307748	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	45		mg/L	P308583	
	SM 2540 D-97	TSS	6	I	mg/L	P308393	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
1814999	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.046		mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P307916	
	SM 5310 B-00	Organic Carbon	6.4		mg C/L	P308330	
1815007	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Pine Log Creek S.R. 2 Walton Co. **Collection Date/Time: 07/11/2016 13:25**

Field ID: G4NW0317

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814992	EPA 180.1 Rev. 2.0	Turbidity	4.6		NTU	P307792	

Field ID: G4NW0317

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814992	EPA 300.0 Rev. 2.1	Chloride	3.2		mg Cl/L	P308872	
		Sulfate	0.49	I	mg SO4/L	P308873	
	SM 2120 B	Color (true)	80		PCU	P307748	
	SM 2320 B-97	Total Alkalinity	9.1		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	31		mg/L	P308583	
	SM 2540 D-97	TSS	5	I	mg/L	P308393	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
1815000	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P307916	
	SM 5310 B-00	Organic Carbon	5.1		mg C/L	P308330	
1815008	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Pine Log Creek Upstream of Long Road

Collection Date/Time: 07/11/2016 13:40

Field ID: G4NW0315

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814993	EPA 180.1 Rev. 2.0	Turbidity	18		NTU	P307792	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P308872	
		Sulfate	1.1		mg SO4/L	P308873	
	SM 2120 B	Color (true)	44	A	PCU	P307751	
	SM 2320 B-97	Total Alkalinity	5.9		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	28		mg/L	P308583	
	SM 2540 D-97	TSS	31		mg/L	P308393	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
1815001	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P307916	
	SM 5310 B-00	Organic Carbon	4.4		mg C/L	P308330	
1815009	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Long Creek Upstream of Long Road

Collection Date/Time: 07/11/2016 14:00

Field ID: G4NW0308

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814994	EPA 180.1 Rev. 2.0	Turbidity	95		NTU	P307794	
	EPA 300.0 Rev. 2.1	Chloride	2.1		mg Cl/L	P308872	
		Sulfate	0.67		mg SO4/L	P308873	

Field ID: G4NW0308

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814994	SM 2120 B	Color (true)	62		PCU	P307751	
	SM 2320 B-97	Total Alkalinity	1.4	I	mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	24	I	mg/L	P308583	
	SM 2540 D-97	TSS	135		mg/L	P308393	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
1815002	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.076		mg P/L	P307916	
	SM 5310 B-00	Organic Carbon	7.4		mg C/L	P308330	
1815010	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Juniper CR FLA 393

Collection Date/Time: 07/11/2016 14:30

Field ID: G4NW0349

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814995	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P307792	
	EPA 300.0 Rev. 2.1	Chloride	4.5		mg Cl/L	P308872	
		Sulfate	1.6		mg SO4/L	P308873	
	SM 2120 B	Color (true)	66		PCU	P307749	
	SM 2320 B-97	Total Alkalinity	6.3		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	30		mg/L	P308583	
	SM 2540 D-97	TSS	8	I	mg/L	P308393	
1815003	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	IY	mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33	Y	mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.30	Y	mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.030	Y	mg P/L	P307916	
1815011	SM 5310 B-00	Organic Carbon	3.9	Y	mg C/L	P308330	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample. 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: Pond Creek in McCloud Bay Upstream of Lake Ella Road

Collection Date/Time: 07/11/2016 14:45

Field ID: G4NW0350

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814996	EPA 180.1 Rev. 2.0	Turbidity	6.7		NTU	P307792	

Field ID: G4NW0350

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814996	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P308872	
		Sulfate	1.6		mg SO4/L	P308873	
	SM 2120 B	Color (true)	64		PCU	P307749	
	SM 2320 B-97	Total Alkalinity	8.0		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	25		mg/L	P308583	
	SM 2540 D-97	TSS	5	I	mg/L	P308393	
	SM 4500 F-C-97	Fluoride	0.035	I	mg F/L	P308099	
1815004	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P307941	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.39		mg N/L	P308150	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P307916	
	SM 5310 B-00	Organic Carbon	4.1		mg C/L	P308409	
1815012	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P307755	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

Sample Location: Pond Creek in McCloud Bay at Pipeline off Sunset Drive

Collection Date/Time: 07/11/2016 15:00

Field ID: G4NW0351

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814997	EPA 180.1 Rev. 2.0	Turbidity	6.5	A	NTU	P307793	
	EPA 300.0 Rev. 2.1	Chloride	4.5		mg Cl/L	P308872	
		Sulfate	1.7		mg SO4/L	P308873	
	SM 2120 B	Color (true)	59	A	PCU	P307749	
	SM 2320 B-97	Total Alkalinity	5.9		mg CaCO3/L	P308094	
	SM 2540 C-97	TDS	24	I	mg/L	P308583	
	SM 2540 D-97	TSS	5	I	mg/L	P308393	
1815005	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308099	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P307976	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P307992	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.31		mg N/L	P308151	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P307916	
1815013	SM 5310 B-00	Organic Carbon	3.9		mg C/L	P308409	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P307755	

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: Natural Bridge Cr. Hwy. 181

Collection Date/Time: 07/11/2016 12:15

Field ID: G3NW0082

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1815347	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P307908	
	EPA 300.0 Rev. 2.1	Chloride	2.9	A	mg Cl/L	P308871	
		Sulfate	1.4	A	mg SO4/L	P308874	

Field ID: G3NW0082

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1815347	SM 2120 B	Color (true)	13		PCU	P307819	
	SM 2320 B-97	Total Alkalinity	69		mg CaCO3/L	P308418	RPD
	SM 2540 C-97	TDS	74		mg/L	P308585	
	SM 2540 D-97	TSS	3	I	mg/L	P308395	
	SM 4500 F-C-97	Fluoride	0.044	I	mg F/L	P308422	
1815350	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P308062	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.11	I	mg N/L	P308567	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.35		mg N/L	P308183	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P307923	
	SM 5310 B-00	Organic Carbon	0.91	I	mg C/L	P308410	
1815353	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.014		mg P/L	P307802	

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: Long Creek Abv. Campground Rd.

Collection Date/Time: 07/11/2016 12:45

Field ID: G4NW0303

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1815348	EPA 180.1 Rev. 2.0	Turbidity	15		NTU	P307908	
	EPA 300.0 Rev. 2.1	Chloride	6.3		mg Cl/L	P308871	
		Sulfate	0.39	I	mg SO4/L	P308874	
	SM 2120 B	Color (true)	52	A	PCU	P307820	
	SM 2320 B-97	Total Alkalinity	9.4		mg CaCO3/L	P308418	RPD
	SM 2540 C-97	TDS	32		mg/L	P308585	
	SM 2540 D-97	TSS	16		mg/L	P308395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308422	
1815351	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P308062	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P308568	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P308183	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P307923	
	SM 5310 B-00	Organic Carbon	5.5		mg C/L	P308410	
1815354	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P307802	

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: Long Creek Upstream of CR2

Collection Date/Time: 07/11/2016 13:10

Field ID: G4NW0304

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1815349	EPA 180.1 Rev. 2.0	Turbidity	5.5		NTU	P307908	
	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P308871	
		Sulfate	0.53		mg SO4/L	P308874	
	SM 2120 B	Color (true)	72	A	PCU	P307819	
	SM 2320 B-97	Total Alkalinity	8.2		mg CaCO3/L	P308418	RPD
	SM 2540 C-97	TDS	29		mg/L	P308585	

Field ID: G4NW0304

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1815349	SM 2540 D-97	TSS	7	I	mg/L	P308395	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P308422	
1815352	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P308062	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P308568	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P308184	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P307989	
	SM 5310 B-00	Organic Carbon	5.0		mg C/L	P308410	
1815355	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.017		mg P/L	P307802	

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.

Non-Conformance Report

NCR ID: 5938

Event(s)	Job(s)	Sample(s)	Test(s)
NW-DIST-2016-07-12-01			
NCR Type: SHIPPING/RECEIVING		NCR Category: Receiving	
Observation:	1) Submittal form indicates 4 coolers were shipped for RQ-2016-07-11-32, only 3 were received. Samples for the following Field IDs were not received: G3NW0082 G4NW0303 G4NW0304		
	2) Sample container collected for Field ID G4NW0349 was not preserved to pH < 2.		
Resolution:	1) Customers (Rick Abad/Nathan Mulkey) were contacted. Second cooler received on 7/13/2016 containing samples for the missing Field IDs. Samples were within temp. range (<6 degrees C) and short holds were logged in prior to expiration.		
	2) Sample was preserved in the lab with Sulfuric Acid on 7/12/2016.		

Authorised by/Date: Kathryn Holland 7/19/2016

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

Chemistry Tim Fitzpatrick (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: P307792

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P307793

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307794

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307908

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308871

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308872

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308873

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308874

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307941

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307976

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P308062

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: P307992

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308567

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308568

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308150

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308183

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308184

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307881

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307916

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307923

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307989

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307755

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307802

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

Reference Method: SM 2120 B
Batch ID: P307748

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P307749

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P307751

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P307819

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P307820

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P308094

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

Reference Method: SM 2320 B-97
Batch ID: P308418

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

Reference Method: SM 2540 C-97
Batch ID: P308582

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P308583

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P308585

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P308392

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P308393

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P308395

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P308099

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P308422

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P308330

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

Reference Method: SM 5310 B-00
Batch ID: P308409

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

Reference Method: SM 5310 B-00
Batch ID: P308410

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: P308871

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308872

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308874

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307941

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: P307941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307976

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P308062

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.3		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307992

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308567

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308568

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308150

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308151

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308183

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308184

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307881

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	93.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307923

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	95.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	95.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307755

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307802

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.7		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P308094

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 2320 B-97
Batch ID: P308418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P308099

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.4		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P308422

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P308330

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.7		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P308409

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.0		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P308410

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308871

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815347	Chloride	100		P	90 - 110
1815541	Chloride	98.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308872

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814875	Chloride	94.9		P	90 - 110
1819272	Chloride	97.5	98.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814875	Sulfate	92.8		P	90 - 110
1819272	Sulfate	94.0	94.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815347	Sulfate	96.1		P	90 - 110
1815541	Sulfate	94.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815005	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P308062

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815352	Ammonia-N	98.9	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307992

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814980	Kjeldahl Nitrogen	89.9	87.9	F/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815275	Kjeldahl Nitrogen	95.3	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814904	NO2NO3-N	94.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815005	NO2NO3-N	91.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815270	NO2NO3-N	92.7	95.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308184

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815352	NO2NO3-N	97.2		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814998	Total-P	98.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307916

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814999	Total-P	97.1	95.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307923

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815270	Total-P	97.8	95.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815352	Total-P	97.4	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815009	O-Phosphate-P	97.1	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815278	O-Phosphate-P	95.4	97.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P308099

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814878	Fluoride	98.1	98.1	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P308422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815541	Fluoride	104	104	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P308330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814976	Organic Carbon	94.6	93.6	P/P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P308409

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815004	Organic Carbon	97.3	97.4	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P308410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1815274	Organic Carbon	108		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814939	Turbidity	4.42	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814997	Turbidity	2.94	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815118	Turbidity	2.52	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P307908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815321	Turbidity	5.64	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308871

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815347	Chloride	0.132	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308872

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308872

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1819272	Chloride	0.654	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1819272	Sulfate	0.371	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815347	Sulfate	0.285	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814998	Ammonia-N	1.11	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815005	Ammonia-N	0.907	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P308062

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815352	Ammonia-N	1.32	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814980	Kjeldahl Nitrogen	1.07	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815275	Kjeldahl Nitrogen	1.05	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P308568

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815431	Kjeldahl Nitrogen	3.69	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814904	NO2NO3-N	0.926	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815005	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815270	NO2NO3-N	3.09	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P308184

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815352	NO2NO3-N	0.903	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814998	Total-P	1.13	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814999	Total-P	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307923

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815270	Total-P	1.72	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815352	Total-P	4.37	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815009	O-Phosphate-P	0.476	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815278	O-Phosphate-P	1.12	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P307748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814990	Color (true)	1.98	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P307749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814997	Color (true)	1.05	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P307751

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814993	Color (true)	0.807	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P307819

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815349	Color (true)	2.61	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P307820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815348	Color (true)	0.0523	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P308094

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814878	Total Alkalinity	0.511	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P308418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815541	Total Alkalinity	11.0	Sample	F	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P308582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814878	TDS	7.04	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P308583

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815163	TDS	2.04	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P308585

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815395	TDS	4.79	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P308099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814878	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P308422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815541	Fluoride	0.482	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P308330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814976	Organic Carbon	0.500	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P308409

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815004	Organic Carbon	0.0848	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P308410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1815274	Organic Carbon	0.956	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B
Run ID: A70507
Included Lab Sample IDs: 1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.5	96.4	P/P	90 - 115
Color (true)	96.7	96.5	P/P	90 - 115
Color (true)	97.1	95.9	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A70508
Included Lab Sample IDs: 1815006, 1815007, 1815008, 1815009, 1815010, 1815011, 1815012, 1815013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.1	101	P/P	90 - 110
O-Phosphate-P	98.7	99.1	P/P	90 - 110
O-Phosphate-P	99.1	99.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A70517
Included Lab Sample IDs: 1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105
Turbidity	100	101	P/P	95 - 105
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A70520
Included Lab Sample IDs: 1815353, 1815354, 1815355

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A70524

Included Lab Sample IDs: 1815347, 1815348, 1815349

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.7	94.2	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A70547

Included Lab Sample IDs: 1815347, 1815348, 1815349

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A70556

Included Lab Sample IDs: 1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A70570

Included Lab Sample IDs: 1815002, 1815351

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.8	P/P	90 - 110
Total-P	99.4	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A70575

Included Lab Sample IDs: 1814998, 1814999, 1815000, 1815001, 1815003, 1815004, 1815005, 1815350

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.2	96.8	P/P	90 - 110
Total-P	96.5	97.0	P/P	90 - 110
Total-P	96.8	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A70579

Included Lab Sample IDs: 1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	93.0	93.0	P/P	90 - 110
NO2NO3-N	94.0	93.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A70586

Included Lab Sample IDs: 1815350, 1815351, 1815352

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A70594

Included Lab Sample IDs: 1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997

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

Reference Method: SM 4500 F-C-97

Run ID: A70594

Included Lab Sample IDs: 1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A70602

Included Lab Sample IDs: 1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	98.7	P/P	90 - 110
Kjeldahl Nitrogen	99.5	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A70606

Included Lab Sample IDs: 1815350, 1815351, 1815352

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	99.0	P/P	90 - 110
NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A70640

Included Lab Sample IDs: 1815352

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.5	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A70669

Included Lab Sample IDs: 1814998, 1814999, 1815000, 1815001, 1815002, 1815003

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	96.6	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A70692

Included Lab Sample IDs: 1815004, 1815005, 1815350, 1815351, 1815352

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	97.9	P/P	90 - 110
Organic Carbon	102	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A70694

Included Lab Sample IDs: 1815347, 1815348, 1815349

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A70694

Included Lab Sample IDs: 1815347, 1815348, 1815349

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A70755

Included Lab Sample IDs: 1815350, 1815351, 1815352

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	101	P/P	90 - 110
Kjeldahl Nitrogen	101	99.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A70802

Included Lab Sample IDs: 1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	103	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Chloride	103	101	P/P	90 - 110
Sulfate	96.6	99.9	P/P	90 - 110
Sulfate	99.0	96.6	P/P	90 - 110
Sulfate	99.9	96.9	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				4.42	
	Turbidity				2.94	
	Turbidity				2.52	
	Turbidity				5.64	
EPA 300.0 Rev. 2.1	Chloride	100	100	98.3	0.132	
	Chloride	99.4	97.5	98.3		0.654
	Sulfate	95.7	94.0	94.4		0.371
	Sulfate	95.9	96.1	94.5	0.285	
EPA 350.1 Rev. 2.0	Ammonia-N	99.9				1.11
	Ammonia-N	98.4	102	103		0.907
	Ammonia-N	98.3	98.9	101		1.32
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	89.9	87.9		1.07

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	95.3	97.0		1.05
	Kjeldahl Nitrogen	102				3.69
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	94.5			0.926
	NO2NO3-N	97.0	91.8			0.0
	NO2NO3-N	101	92.7	95.7		3.09
	NO2NO3-N	102	97.2			0.903
EPA 365.1 Rev. 2.0	Total-P	97.4	98.8	100		1.13
	Total-P	93.0	97.1	95.0		1.97
	Total-P	95.3	97.8	95.2		1.72
	Total-P	95.8	97.4	102		4.37
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.6	97.1	97.6		0.476
	O-Phosphate-P	98.7	95.4	97.2		1.12
SM 2120 B	Color (true)				1.98	
	Color (true)				1.05	
	Color (true)				0.807	
	Color (true)				2.61	
	Color (true)				0.0523	
SM 2320 B-97	Total Alkalinity	104			0.511	
	Total Alkalinity	103			11.0	
SM 2540 C-97	TDS				7.04	
	TDS				2.04	
	TDS				4.79	
SM 4500 F-C-97	Fluoride	99.4	98.1	98.1		0.0
	Fluoride	99.3	104	104		0.482
SM 5310 B-00	Organic Carbon	93.7	94.6	93.6		0.500
	Organic Carbon	98.0	97.3	97.4		0.0848
	Organic Carbon	98.4	108			0.956

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005, 1815350, 1815351, 1815352
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005, 1815350, 1815351, 1815352
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005, 1815350, 1815351, 1815352
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005, 1815350, 1815351, 1815352
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1815006, 1815007, 1815008, 1815009, 1815010, 1815011, 1815012, 1815013, 1815353, 1815354, 1815355

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2120 B / E31780	True Color measured at 450 nm	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997, 1815347, 1815348, 1815349
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005, 1815350, 1815351, 1815352

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	07/12/2016			07/12/2016 15:57	Blanca Fach	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997
	07/13/2016			07/13/2016 11:49	Blanca Fach	1815347, 1815348, 1815349
EPA 300.0 Rev. 2.1	07/12/2016			07/29/2016	Ping Hua	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997
	07/13/2016			07/29/2016	Ping Hua	1815347, 1815348, 1815349
EPA 350.1 Rev. 2.0	07/12/2016			07/14/2016	Diana M. Turner	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005
	07/13/2016			07/15/2016	Diana M. Turner	1815350, 1815351, 1815352
EPA 351.2 Rev. 2.0	07/12/2016	07/15/2016	Sofia Elnemr	07/18/2016	Christopher Armour	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005
	07/13/2016	07/25/2016	Martin Acosta	07/26/2016	Christopher Armour	1815350, 1815351, 1815352
EPA 353.2 Rev. 2.0	07/12/2016			07/15/2016	Beverly Y. Sanders	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005
	07/13/2016			07/18/2016	Beverly Y. Sanders	1815350, 1815351, 1815352
EPA 365.1 Rev. 2.0	07/12/2016	07/14/2016	Vijayalakshmi Reddy	07/15/2016	Lipi Saha	1814998, 1814999, 1815000, 1815001, 1815002, 1815003, 1815004, 1815005
	07/13/2016	07/14/2016	Vijayalakshmi Reddy	07/15/2016	Lipi Saha	1815350, 1815351
	07/13/2016	07/15/2016	Vijayalakshmi Reddy	07/20/2016	Lipi Saha	1815352
EPA 365.1 Rev. 2.0 dissolved	07/12/2016			07/12/2016 14:46	Julia Storbeck	1815009
	07/12/2016			07/12/2016 15:41	Julia Storbeck	1815006
	07/12/2016			07/12/2016 15:42	Julia Storbeck	1815007, 1815008
	07/12/2016			07/12/2016 15:43	Julia Storbeck	1815010
	07/12/2016			07/12/2016 15:48	Julia Storbeck	1815011
	07/12/2016			07/12/2016 15:49	Julia Storbeck	1815012
	07/12/2016			07/12/2016 15:50	Julia Storbeck	1815013
	07/13/2016			07/13/2016 11:41	Julia Storbeck	1815353
	07/13/2016			07/13/2016 11:42	Julia Storbeck	1815354
	07/13/2016			07/13/2016 11:43	Julia Storbeck	1815355
SM 2120 B	07/12/2016			07/12/2016 15:03	Rochelle Y Jackson	1814990
	07/12/2016			07/12/2016 15:04	Rochelle Y Jackson	1814991, 1814992
	07/12/2016			07/12/2016 15:09	Rochelle Y Jackson	1814995
	07/12/2016			07/12/2016 15:10	Rochelle Y Jackson	1814996
	07/12/2016			07/12/2016 15:11	Rochelle Y Jackson	1814997
	07/12/2016			07/12/2016 15:34	Rochelle Y Jackson	1814993
	07/12/2016			07/12/2016 15:35	Rochelle Y Jackson	1814994
	07/13/2016			07/13/2016 12:03	Rochelle Y Jackson	1815347
	07/13/2016			07/13/2016 12:05	Rochelle Y Jackson	1815349
	07/13/2016			07/13/2016 12:07	Rochelle Y Jackson	1815348
SM 2320 B-97	07/12/2016			07/16/2016	Dale L. Simmons	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997
	07/13/2016			07/20/2016	Dale L. Simmons	1815347, 1815348, 1815349

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 C-97	07/12/2016			07/15/2016	Yijie Li	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997
	07/13/2016			07/15/2016	Yijie Li	1815347, 1815348, 1815349
SM 2540 D-97	07/12/2016			07/15/2016	Yijie Li	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997
	07/13/2016			07/15/2016	Yijie Li	1815347, 1815348, 1815349
SM 4500 F-C-97	07/12/2016			07/16/2016	Dale L. Simmons	1814990, 1814991, 1814992, 1814993, 1814994, 1814995, 1814996, 1814997
	07/13/2016			07/20/2016	Dale L. Simmons	1815347, 1815348, 1815349
SM 5310 B-00	07/12/2016			07/20/2016	Diana M. Turner	1814998, 1814999, 1815000, 1815001, 1815002, 1815003
	07/12/2016			07/20/2016	Sofia Elnemr	1815004, 1815005
	07/13/2016			07/21/2016	Sofia Elnemr	1815350, 1815351, 1815352