Chemical Analysis Report

NW-DIST-2016-09-14-02

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

Event Description: **WBID 275 28 27 336**
Request ID: **RQ-2016-08-08-54**
Customer: **NW-DIST**
Project ID: **SMP**

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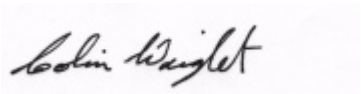
Certified by: Colin Wright, Environmental Administrator

Date Certified: 05-OCT-2016 09:51



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: TRAMMEL CREEK @ HWY 4 **Collection Date/Time: 09/13/2016 11:05**

Field ID: G4NW0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831262	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P311136	
	EPA 300.0 Rev. 2.1	Chloride	4.7		mg Cl/L	P311707	
		Sulfate	4.0		mg SO4/L	P311705	
	SM 2120 B	Color (true)	46		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	13		mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	35		mg/L	P311817	
	SM 2540 D-97	TSS	2	I	mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831270	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P311419	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23		mg N/L	P311882	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	4.1		mg C/L	P311511	
1831278	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P311147	

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

Sample Location: BAGGETT CREEK UPSTREAM OF HWY 90 **Collection Date/Time: 09/13/2016 11:30**

Field ID: G4NW0336 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831263	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P311136	
	EPA 300.0 Rev. 2.1	Chloride	4.3		mg Cl/L	P311707	
		Sulfate	0.61		mg SO4/L	P311705	
	SM 2120 B	Color (true)	21		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	8.2		mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	24	I	mg/L	P311817	
	SM 2540 D-97	TSS	4	I	mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831271	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P311419	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P311471	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.59		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	2.2		mg C/L	P311511	
1831279	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P311147	

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

Sample Location: BAGGETT CREEK UPSTREAM OF KEYSER MILL ROAD **Collection Date/Time: 09/13/2016 12:15**

Field ID: G4NW0335 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831264	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P311136	
	EPA 300.0 Rev. 2.1	Chloride	4.8		mg Cl/L	P311704	

Field ID: G4NW0335 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831264	EPA 300.0 Rev. 2.1	Sulfate	0.54		mg SO4/L	P311706	
	SM 2120 B	Color (true)	15		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	3.9		mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	27		mg/L	P311817	
	SM 2540 D-97	TSS	2	I	mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831272	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P311419	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P311471	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.89		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	1.7		mg C/L	P311511	
1831280	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P311147	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: PANTHER CREEK BELOW SHERMAN KENNEDY RD. **Collection Date/Time: 09/13/2016 12:55**

Field ID: G4NW0295 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831265	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P311137	
	EPA 300.0 Rev. 2.1	Chloride	3.2		mg Cl/L	P311704	
		Sulfate	0.91		mg SO4/L	P311706	
	SM 2120 B	Color (true)	18		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	1.5	I	mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	18	I	mg/L	P311817	
	SM 2540 D-97	TSS	12		mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831273	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P311419	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P311471	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	1.8		mg C/L	P311511	
1831281	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P311147	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: PANTHER CREEK UPSTREAM OF JOHN RILEY BARNHILL RD. **Collection Date/Time: 09/13/2016 13:15**

Field ID: G4NW0296 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831266	EPA 180.1 Rev. 2.0	Turbidity	2.4	A	NTU	P311137	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P311704	
		Sulfate	1.4		mg SO4/L	P311706	

Field ID: G4NW0296 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831266	SM 2120 B	Color (true)	15		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	0.74	I	mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	15	I	mg/L	P311817	
	SM 2540 D-97	TSS	2	I	mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831274	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P311309	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P311471	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.087		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	1.6		mg C/L	P311511	
1831282	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P311147	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: PANTHER CREEK UPSTREAM OF HIGH BRIDGE ROAD **Collection Date/Time: 09/13/2016 13:55**

Field ID: G4NW0297 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831267	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P311137	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P311704	
		Sulfate	1.8		mg SO4/L	P311706	
	SM 2120 B	Color (true)	17		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	1.1	I	mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	15	U	mg/L	P311817	
	SM 2540 D-97	TSS	3	I	mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831275	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P311309	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.099	I	mg N/L	P311471	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.041		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	1.7		mg C/L	P311511	
1831283	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P311148	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: BIG HORSE CREEK S.R.2 OKA.CO. **Collection Date/Time: 09/13/2016 14:20**

Field ID: G4NW0299 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831268	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P311137	
	EPA 300.0 Rev. 2.1	Chloride	3.5		mg Cl/L	P311704	
		Sulfate	0.79		mg SO4/L	P311706	
	SM 2120 B	Color (true)	31		PCU	P311156	
	SM 2320 B-97	Total Alkalinity	2.3	I	mg CaCO3/L	P311384	

Field ID: G4NW0299 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831268	SM 2540 C-97	TDS	15	U	mg/L	P311817	
	SM 2540 D-97	TSS	2	I	mg/L	P311783	
	SM 4500 F-C-97	Fluoride	0.036	I	mg F/L	P311388	
1831276	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P311309	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P311471	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.044		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.046		mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	2.4		mg C/L	P311511	
1831284	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.023		mg P/L	P311147	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: BIG HORSE CREEK UPSTREAM OF OLD RIVER ROAD **Collection Date/Time: 09/13/2016 14:40**

Field ID: G4NW0298 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831269	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P311137	
	EPA 300.0 Rev. 2.1	Chloride	3.7		mg Cl/L	P311704	
		Sulfate	0.85		mg SO4/L	P311706	
	SM 2120 B	Color (true)	28	A	PCU	P311156	
	SM 2320 B-97	Total Alkalinity	3.2		mg CaCO3/L	P311384	
	SM 2540 C-97	TDS	17	I	mg/L	P311818	
	SM 2540 D-97	TSS	4	I	mg/L	P311784	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P311388	
1831277	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P311309	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P311611	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P311465	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P311828	
	SM 5310 B-00	Organic Carbon	2.3		mg C/L	P311511	
1831285	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.017		mg P/L	P311147	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P311136

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P311137

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P311137

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311704

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311705

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311706

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311707

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311309

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311419

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311471

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311611

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311882

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311465

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311828

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311147

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311148

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

Reference Method: SM 2120 B
Batch ID: P311156

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P311384

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

Reference Method: SM 2540 C-97
Batch ID: P311817

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P311818

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P311783

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P311784

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P311388

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P311511

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: P311704

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311706

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311707

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311309

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311419

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311471

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311611

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311882

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311465

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311828

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311147

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: P311148

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P311384

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P311388

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P311511

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	105		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311704

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831091	Chloride	99.3		P	90 - 110
1831374	Chloride	99.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831628	Sulfate	98.2		P	90 - 110
1831814	Sulfate	95.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311706

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831091	Sulfate	95.4		P	90 - 110
1831374	Sulfate	94.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311707

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831628	Chloride	102		P	90 - 110
1831814	Chloride	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311309

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831113	Ammonia-N	104	100	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311419

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829352	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311471

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831294	Kjeldahl Nitrogen	93.9	83.1	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311611

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831613	Kjeldahl Nitrogen	86.8	99.7	F/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311882

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831270	Kjeldahl Nitrogen	96.6	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311465

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831228	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831270	Total-P	99.0	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831278	O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311148

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831283	O-Phosphate-P	101	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P311388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831288	Fluoride	98.7	99.8	P/P	91 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P311511

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831114	Organic Carbon	106	107	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P311136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831219	Turbidity	0.621	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P311137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831266	Turbidity	2.12	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311704

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831091	Chloride	0.000447	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831628	Sulfate	0.209	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831628	Chloride	0.288	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831113	Ammonia-N	2.26	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829352	Ammonia-N	0.639	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311471

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831294	Kjeldahl Nitrogen	10.4	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311611

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831613	Kjeldahl Nitrogen	9.49	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831270	Kjeldahl Nitrogen	3.77	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311465

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831228	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831270	Total-P	1.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831278	O-Phosphate-P	0.261	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311148

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831283	O-Phosphate-P	0.198	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B
Batch ID: P311156

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831269	Color (true)	5.35	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P311384

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831288	Total Alkalinity	0.218	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P311817

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831162	TDS	9.38	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P311818

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831293	TDS	1.89	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P311388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831288	Fluoride	0.974	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P311511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831114	Organic Carbon	1.21	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A71618
Included Lab Sample IDs: 1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A71621
Included Lab Sample IDs: 1831278, 1831279, 1831280, 1831281, 1831282, 1831283, 1831284, 1831285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.9	98.4	P/P	90 - 110
O-Phosphate-P	98.5	99.4	P/P	90 - 110
O-Phosphate-P	99.5	98.5	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A71622
Included Lab Sample IDs: 1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.4	95.9	P/P	85 - 115
Color (true)	95.8	95.4	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A71673
Included Lab Sample IDs: 1831274, 1831275, 1831276, 1831277

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

Reference Method: SM 2320 B-97
Run ID: A71696
Included Lab Sample IDs: 1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269

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: A71696
Included Lab Sample IDs: 1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A71707
Included Lab Sample IDs: 1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	104	P/P	90 - 110
NO2NO3-N	104	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A71708
Included Lab Sample IDs: 1831270, 1831271, 1831272, 1831273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.5	97.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A71732
Included Lab Sample IDs: 1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	104	105	P/P	90 - 110
Organic Carbon	106	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A71762
Included Lab Sample IDs: 1831271, 1831272, 1831273, 1831274, 1831275, 1831276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.1	94.1	P/P	90 - 110
Kjeldahl Nitrogen	94.1	94.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A71784
Included Lab Sample IDs: 1831277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	94.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A71789
Included Lab Sample IDs: 1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.2	98.3	P/P	90 - 110
Chloride	98.0	97.2	P/P	90 - 110
Sulfate	97.1	98.2	P/P	90 - 110
Sulfate	98.8	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A71852
Included Lab Sample IDs: 1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A71891
Included Lab Sample IDs: 1831270

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.0	104	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	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					0.621	
	Turbidity					2.12	
EPA 300.0 Rev. 2.1	Chloride	98.0	99.3	99.8		0.0004	
	Chloride	98.7	102	99.2		0.288	
	Sulfate	94.9	98.2	95.6		0.209	
	Sulfate	94.0	95.4	94.3			
EPA 350.1 Rev. 2.0	Ammonia-N	103	104	100			2.26
	Ammonia-N	95.7	101	102			0.639
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	93.8	93.9	83.1			10.4
	Kjeldahl Nitrogen	96.4	86.8	99.7			9.49
	Kjeldahl Nitrogen	98.7	96.6	101			3.77
EPA 353.2 Rev. 2.0	NO2NO3-N	106	106	106			0.0
EPA 365.1 Rev. 2.0	Total-P	101	99.0	97.9			1.06
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	99.8	100			0.261
	O-Phosphate-P	99.8	101	101			0.198
SM 2120 B	Color (true)					5.35	
SM 2320 B-97	Total Alkalinity	102				0.218	
SM 2540 C-97	TDS					9.38	
	TDS					1.89	
SM 4500 F-C-97	Fluoride	99.0	98.7	99.8			0.974
SM 5310 B-00	Organic Carbon	105	106	107			1.21

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1831278, 1831279, 1831280, 1831281, 1831282, 1831283, 1831284, 1831285
SM 2120 B / E31780	True Color measured at 450 nm	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277

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	09/14/2016			09/14/2016 15:33	Sima Feizi	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
EPA 300.0 Rev. 2.1	09/14/2016			09/22/2016	Ping Hua	1831264, 1831265, 1831266, 1831267, 1831268, 1831269
	09/14/2016			09/23/2016	Ping Hua	1831262, 1831263
EPA 350.1 Rev. 2.0	09/14/2016			09/15/2016	Joseph Suarez	1831274, 1831275, 1831276, 1831277
	09/14/2016			09/16/2016	Sofia Elnemr	1831270, 1831271, 1831272, 1831273
EPA 351.2 Rev. 2.0	09/14/2016	09/20/2016	Adrian Shelby	09/21/2016	Christopher Armour	1831271, 1831272, 1831273, 1831274, 1831275, 1831276
	09/14/2016	09/21/2016	Adrian Shelby	09/22/2016	Christopher Armour	1831277
	09/14/2016	09/27/2016	Adrian Shelby	09/28/2016	Christopher Armour	1831270
EPA 353.2 Rev. 2.0	09/14/2016			09/19/2016	Beverly Y. Sanders	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277
EPA 365.1 Rev. 2.0	09/14/2016	09/26/2016	Vijayalakshmi Reddy	09/27/2016	Lipi Saha	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277
EPA 365.1 Rev. 2.0 dissolved	09/14/2016			09/14/2016 15:25	Julia Storbeck	1831278
	09/14/2016			09/14/2016 15:33	Julia Storbeck	1831283
	09/14/2016			09/14/2016 16:37	Julia Storbeck	1831279
	09/14/2016			09/14/2016 16:38	Julia Storbeck	1831280
	09/14/2016			09/14/2016 16:39	Julia Storbeck	1831281
	09/14/2016			09/14/2016 16:40	Julia Storbeck	1831282, 1831284
	09/14/2016			09/14/2016 16:41	Julia Storbeck	1831285
SM 2120 B	09/14/2016			09/14/2016 20:34	Julie Michelle Frank	1831262
	09/14/2016			09/14/2016 20:35	Julie Michelle Frank	1831263, 1831264
	09/14/2016			09/14/2016 20:36	Julie Michelle Frank	1831265
	09/14/2016			09/14/2016 20:38	Julie Michelle Frank	1831266
	09/14/2016			09/14/2016 20:39	Julie Michelle Frank	1831267
	09/14/2016			09/14/2016 20:40	Julie Michelle Frank	1831268
	09/14/2016			09/14/2016 20:41	Julie Michelle Frank	1831269
SM 2320 B-97	09/14/2016			09/17/2016	Dale L. Simmons	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 2540 C-97	09/14/2016			09/19/2016	Yijie Li	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 2540 D-97	09/14/2016			09/19/2016	Yijie Li	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 4500 F-C-97	09/14/2016			09/17/2016	Dale L. Simmons	1831262, 1831263, 1831264, 1831265, 1831266, 1831267, 1831268, 1831269
SM 5310 B-00	09/14/2016			09/20/2016	Sofia Elnemr	1831270, 1831271, 1831272, 1831273, 1831274, 1831275, 1831276, 1831277