

Chemical Analysis Report

NE-DIST-2018-11-20-01

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

Event Description: **LSJR Southside 2**
Request ID: **RQ-2018-11-19-11**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 13-DEC-2018 10:12

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

Case Narrative

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

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

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: DEEP BOTTOM CREEK AT I-295

Collection Date/Time: 11/19/2018 10:00

Field ID: 20030596

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042719	EPA 180.1 Rev. 2.0	Turbidity	6.9		NTU	P354997	
	EPA 300.0 Rev. 2.1	Chloride	29	A	mg Cl/L	P355364	
		Sulfate	24	A	mg SO4/L	P355367	
	SM 2120 B	Color (true)	46		PCU	P355004	
	SM 2320 B-97	Total Alkalinity	64		mg CaCO3/L	P355190	
	SM 2540 C-97	TDS	176		mg/L	P355235	
	SM 2540 D-97	TSS	2	I	mg/L	P355194	
	SM 4500 F-C-97	Fluoride	0.091	I	mg F/L	P355193	
2042721	EPA 350.1 Rev. 2.0	Ammonia-N	0.063		mg N/L	P355160	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P355122	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P355257	
	EPA 365.1 Rev. 2.0	Total-P	0.044		mg P/L	P355029	
	SM 5310 B-00	Organic Carbon	8.1		mg C/L	P355171	
2042723	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P354992	
2042738	EPA 8321B	2,4-D	0.038		ug/L	P354744	
		Sucralose**	0.094		ug/L	P355085	
		Bentazon	0.025		ug/L	P354744	
		MCP	0.014		ug/L	P354744	
		Triclopyr**	0.0040	U	ug/L	P354744	
		Imidacloprid	0.032		ug/L	P354744	
		Diuron	0.13		ug/L	P354744	
		Pyraclostrobin**	0.0020	U	ug/L	P354744	
		Primidone**	0.0040	U	ug/L	P354744	
		Linuron	0.0040	U	ug/L	P354744	
		Acetaminophen**	0.0080	U	ug/L	P354744	
		Fenuron	0.057	I	ug/L	P354744	
		Imazapyr**	0.16		ug/L	P354744	
		Carbamazepine**	8.0E-04	U	ug/L	P354744	
		Fluridone**	0.047		ug/L	P354744	
		Hydrocodone**	8.0E-04	U	ug/L	P354744	
		Naproxen**	0.0080	U	ug/L	P354744	
		Ibuprofen**	0.020	U	ug/L	P354744	
		Acesulfame K**	0.25	I	ug/L	P354971	
2042742	EPA 200.7 Rev. 4.4	Calcium	27.1		mg/L	P355092	
		Iron	1.06E+03		ug/L	P355092	
		Magnesium	5.71		mg/L	P355092	
		Potassium	2.0		mg/L	P355092	
		Sodium	17.0		mg/L	P355092	
	EPA 200.8 Rev. 5.4	Zinc	6.5	I	ug/L	P355092	
		Arsenic	0.92		ug/L	P355092	
		Cadmium	0.020	U	ug/L	P355092	
		Chromium	0.50	I	ug/L	P355092	
		Copper	1.01		ug/L	P355092	

Field ID: 20030596

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042742	EPA 200.8 Rev. 5.4	Lead	0.22		ug/L	P355092	
		Nickel	0.35	I	ug/L	P355092	
		Silver	0.010	U	ug/L	P355092	

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: DEEP BOTTOM CREEK AT SCOTT MILL RD.

Collection Date/Time: 11/19/2018 10:25

Field ID: 20030595

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042720	EPA 180.1 Rev. 2.0	Turbidity	4.6		NTU	P354998	
	EPA 300.0 Rev. 2.1	Chloride	28		mg Cl/L	P355364	
		Sulfate	16		mg SO4/L	P355367	
	SM 2120 B	Color (true)	46		PCU	P355004	
	SM 2320 B-97	Total Alkalinity	75		mg CaCO3/L	P355190	
	SM 2540 C-97	TDS	168		mg/L	P355236	
	SM 2540 D-97	TSS	2	I	mg/L	P355195	
	SM 4500 F-C-97	Fluoride	0.088	I	mg F/L	P355193	
2042722	EPA 350.1 Rev. 2.0	Ammonia-N	0.061		mg N/L	P355161	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P355122	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P355257	
	EPA 365.1 Rev. 2.0	Total-P	0.045		mg P/L	P355030	
	SM 5310 B-00	Organic Carbon	8.1		mg C/L	P355172	
2042724	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.017		mg P/L	P354993	
2042739	EPA 8321B	2,4-D	0.071		ug/L	P354744	
		Sucralose**	0.12		ug/L	P355085	
		Bentazon	0.016		ug/L	P354744	
		MCP	0.011		ug/L	P354744	
		Triclopyr**	0.0040	U	ug/L	P354744	
		Imidacloprid	0.028		ug/L	P354744	
		Diuron	0.052		ug/L	P354744	
		Pyraclostrobin**	0.0020	U	ug/L	P354744	
		Primidone**	0.0040	U	ug/L	P354744	
		Linuron	0.0040	U	ug/L	P354744	
		Acetaminophen**	0.0080	U	ug/L	P354744	
		Fenuron	0.030	I	ug/L	P354744	
		Imazapyr**	0.12		ug/L	P354744	
		Carbamazepine**	0.0011	I	ug/L	P354744	
		Fluridone**	0.035		ug/L	P354744	
		Hydrocodone**	8.0E-04	U	ug/L	P354744	
		Naproxen**	0.0080	U	ug/L	P354744	
		Ibuprofen**	0.020	U	ug/L	P354744	
		Acesulfame K**	0.22	I	ug/L	P354971	
2042743	EPA 200.7 Rev. 4.4	Calcium	32.0		mg/L	P355092	
		Iron	910		ug/L	P355092	
		Magnesium	4.61		mg/L	P355092	
		Potassium	2.0		mg/L	P355092	
		Sodium	16.2		mg/L	P355092	
		Zinc	5.0	U	ug/L	P355092	
	EPA 200.8 Rev. 5.4	Arsenic	1.17		ug/L	P355092	
		Cadmium	0.209		ug/L	P355092	
		Chromium	0.40	U	ug/L	P355092	
		Copper	0.97		ug/L	P355092	

Field ID: 20030595

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042743	EPA 200.8 Rev. 5.4	Lead	0.21		ug/L	P355092	
		Nickel	0.49	I	ug/L	P355092	
		Silver	0.010	U	ug/L	P355092	

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: OLDFIELD CR @ LORETTO RD

Collection Date/Time: 11/19/2018 11:45

Field ID: 20030563

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042713	EPA 180.1 Rev. 2.0	Turbidity	6.4		NTU	P354997	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P355363	
		Sulfate	22		mg SO4/L	P355366	
		Color (true)	31		PCU	P355003	
	SM 2320 B-97	Total Alkalinity	89		mg CaCO3/L	P355190	
	SM 2540 C-97	TDS	187		mg/L	P355235	
	SM 2540 D-97	TSS	2	I	mg/L	P355194	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P355193	
2042715	EPA 350.1 Rev. 2.0	Ammonia-N	0.058		mg N/L	P355160	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P355100	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P355257	
	EPA 365.1 Rev. 2.0	Total-P	0.050		mg P/L	P355029	
	SM 5310 B-00	Organic Carbon	6.8		mg C/L	P355171	
2042717	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.020		mg P/L	P354992	
2042740	EPA 200.7 Rev. 4.4	Calcium	36.6		mg/L	P355092	
		Iron	930		ug/L	P355092	
		Magnesium	5.37		mg/L	P355092	
		Potassium	2.1		mg/L	P355092	
		Sodium	14.6		mg/L	P355092	
		Zinc	5.0	U	ug/L	P355092	
	EPA 200.8 Rev. 5.4	Arsenic	0.92		ug/L	P355092	
		Cadmium	0.020	U	ug/L	P355092	
		Chromium	0.40	U	ug/L	P355092	
		Copper	1.86		ug/L	P355092	
		Lead	0.093	I	ug/L	P355092	
		Nickel	0.35	I	ug/L	P355092	
		Silver	0.010	U	ug/L	P355092	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

Sample Location: OLDFIELD CR @ JULINGTON CREEK ROAD

Collection Date/Time: 11/19/2018 12:20

Field ID: 20030684

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042714	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P354997	
	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P355364	
		Sulfate	30		mg SO4/L	P355367	
		Color (true)	36		PCU	P355004	
	SM 2320 B-97	Total Alkalinity	78		mg CaCO3/L	P355190	
	SM 2540 C-97	TDS	195		mg/L	P355235	
	SM 2540 D-97	TSS	2	U	mg/L	P355194	
	SM 4500 F-C-97	Fluoride	0.10		mg F/L	P355193	
2042716	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P355160	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P355100	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P355257	
	EPA 365.1 Rev. 2.0	Total-P	0.059		mg P/L	P355029	
	SM 5310 B-00	Organic Carbon	6.7		mg C/L	P355171	
2042718	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.034		mg P/L	P354992	
2042741	EPA 200.7 Rev. 4.4	Calcium	32.5		mg/L	P355092	
		Iron	620		ug/L	P355092	
		Magnesium	7.38		mg/L	P355092	
		Potassium	2.5		mg/L	P355092	
		Sodium	16.9		mg/L	P355092	
		Zinc	5.0	U	ug/L	P355092	
	EPA 200.8 Rev. 5.4	Arsenic	0.77		ug/L	P355092	
		Cadmium	0.020	U	ug/L	P355092	
		Chromium	0.40	U	ug/L	P355092	
		Copper	1.0		ug/L	P355092	
		Lead	0.085	I	ug/L	P355092	
		Nickel	0.28	I	ug/L	P355092	
		Silver	0.010	U	ug/L	P355092	

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: FIELD BLANK NE ROC DI

Collection Date/Time: 11/19/2018 10:55

Field ID: BLANK 11192018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2042725	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P354998	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P355364	
		Sulfate	0.20	U	mg SO4/L	P355367	
	SM 2120 B	Color (true)	2.5	U	PCU	P355004	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P355190	
	SM 2540 C-97	TDS	15	U	mg/L	P355236	
	SM 2540 D-97	TSS	2	U	mg/L	P355195	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P355193	
2042726	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P355161	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P355122	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P355258	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P355030	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P355172	
2042727	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P354993	
2042744	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P355092	
		Iron	30	U	ug/L	P355092	
		Magnesium	0.040	U	mg/L	P355092	
		Potassium	0.30	U	mg/L	P355092	
		Sodium	0.50	U	mg/L	P355092	
		Zinc	5.0	U	ug/L	P355092	
		EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P355092
	Cadmium		0.020	U	ug/L	P355092	
	Chromium		0.40	U	ug/L	P355092	
	Copper		0.20	U	ug/L	P355092	
	Lead		0.050	U	ug/L	P355092	
	Nickel		0.20	U	ug/L	P355092	
	Silver		0.010	U	ug/L	P355092	

Ref. Method and Comment:

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: P354997

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P354998

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355092

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355092

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355363

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355364

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355366

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355367

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355160

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355161

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355100

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355122

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355257

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355258

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355029

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355030

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354992

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354993

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

Reference Method: EPA 8321B
Batch ID: P354744

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P354971

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L

Reference Method: EPA 8321B
Batch ID: P355085

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P355003

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P355004

Component	Result	Code	Units
-----------	--------	------	-------

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P355004

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P355190

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

Reference Method: SM 2540 C-97
Batch ID: P355235

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P355236

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P355194

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P355195

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P355193

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P355171

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

Reference Method: SM 5310 B-00
Batch ID: P355172

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355092

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	96.3		P	85 - 115
Iron	98.5		P	85 - 115
Magnesium	101		P	85 - 115
Potassium	96.7		P	85 - 115
Sodium	96.1		P	85 - 115
Zinc	94.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355092

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	103		P	85 - 115
Cadmium	105		P	85 - 115
Chromium	103		P	85 - 115
Copper	101		P	85 - 115
Lead	99.1		P	85 - 115
Nickel	101		P	85 - 115
Silver	97.8		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355363

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355364

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355366

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355367

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355160

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.7		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355161

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: P355100

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355122

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355257

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355258

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355029

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355030

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354992

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354993

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P354744

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	79.9		P	40 - 150
Acetaminophen	96.2		P	30 - 150
Bentazon	83.4		P	30 - 150
Carbamazepine	74.3		P	40 - 150
Diuron	68.8		P	40 - 150
Fenuron	84.7		P	40 - 150
Fluridone	94.8		P	40 - 150
Hydrocodone	85.3		P	40 - 150
Ibuprofen	70.3		P	40 - 150
Imazapyr	74.2		P	40 - 150
Imidacloprid	97.6		P	40 - 160
Linuron	58.2		P	40 - 150
MCPP	96.8		P	40 - 150
Naproxen	81.4		P	40 - 150
Primidone	64.0		P	40 - 150
Pyraclostrobin	71.8		P	40 - 150
Triclopyr	60.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P354971

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	94.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P355085

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	97.8		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P355003

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.5		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P355004

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.7		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P355190

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P355193

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P355193

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	103		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P355171

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P355172

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042743	Calcium	96.1		P	80 - 120
2042743	Iron	101		P	80 - 120
2042743	Magnesium	95.1		P	80 - 120
2042743	Potassium	98.9		P	80 - 120
2042743	Sodium	98.0		P	80 - 120
2042743	Zinc	93.9		P	80 - 120
2042892	Calcium	97.3		P	80 - 120
2042892	Iron	95.5	94.4	P/P	80 - 120
2042892	Magnesium	97.9	96.1	P/P	80 - 120
2042892	Potassium	93.9	93.4	P/P	80 - 120
2042892	Sodium	96.8		P	80 - 120
2042892	Zinc	90.3	88.0	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042743	Arsenic	103		P	80 - 120
2042743	Cadmium	107		P	80 - 120
2042743	Chromium	104		P	80 - 120
2042743	Copper	97.5		P	80 - 120
2042743	Lead	100		P	80 - 120
2042743	Nickel	98.1		P	80 - 120
2042743	Silver	98.5		P	80 - 120
2042892	Arsenic	105	104	P/P	80 - 120
2042892	Cadmium	108	108	P/P	80 - 120
2042892	Chromium	106	105	P/P	80 - 120
2042892	Copper	98.5	97.5	P/P	80 - 120
2042892	Lead	103	102	P/P	80 - 120
2042892	Nickel	96.2	94.7	P/P	80 - 120
2042892	Silver	99.2	98.0	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042503	Chloride	94.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355364

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042719	Chloride	96.2		P	90 - 110
2043000	Chloride	97.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355366

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042501	Sulfate	98.2		P	90 - 110
2042503	Sulfate	95.7		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042719	Sulfate	97.1		P	90 - 110
2043000	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355160

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2041606	Ammonia-N	98.5	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042752	Ammonia-N	100	98.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042508	Kjeldahl Nitrogen	99.4	97.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355122

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042758	Kjeldahl Nitrogen	101	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042506	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042758	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355029

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042535	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042722	Total-P	97.8	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354992

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042512	O-Phosphate-P	95.3	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354993

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042761	O-Phosphate-P	99.9	101	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P354744

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042354	2,4-D	103	99.6	P/P	40 - 150
2042354	Acetaminophen	114	117	P/P	30 - 150
2042354	Bentazon	45.6	50.4	P/P	30 - 150
2042354	Carbamazepine	75.5	79.1	P/P	40 - 150
2042354	Diuron	66.9	69.6	P/P	40 - 150
2042354	Fenuron	79.6	82.6	P/P	40 - 150
2042354	Fluridone	88.3	103	P/P	40 - 150
2042354	Hydrocodone	80.1	80.7	P/P	40 - 150
2042354	Ibuprofen	81.7	90.2	P/P	40 - 150
2042354	Imazapyr	92.9	82.5	P/P	40 - 150
2042354	Imidacloprid	131	131	P/P	40 - 160
2042354	Linuron	64.7	64.6	P/P	40 - 150
2042354	MCP	142	131	P/P	40 - 150
2042354	Naproxen	86.2	71.7	P/P	40 - 150
2042354	Primidone	70.7	72.9	P/P	40 - 150
2042354	Pyraclostrobin	51.6	51.7	P/P	40 - 150
2042354	Triclopyr	97.7	89.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P354971

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042005	Acesulfame K	137	131	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P355085

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042005	Sucralose	85.2	101	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P355193

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042533	Fluoride	101	102	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P355171

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
---------------	-----------	---------	---------	-----------	----------------

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P355171

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042318	Organic Carbon	109		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P355172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2042722	Organic Carbon	95.4	93.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P354997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042501	Turbidity	0.847	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P354998

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042811	Turbidity	3.59	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042892	Calcium	0.644	Spike	P	0 - 20
2042892	Iron	0.922	Spike	P	0 - 20
2042892	Magnesium	1.02	Spike	P	0 - 20
2042892	Potassium	0.444	Spike	P	0 - 20
2042892	Sodium	0.0570	Spike	P	0 - 20
2042892	Zinc	2.58	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042892	Arsenic	1.54	Spike	P	0 - 20
2042892	Cadmium	0.748	Spike	P	0 - 20
2042892	Chromium	0.795	Spike	P	0 - 20
2042892	Copper	1.06	Spike	P	0 - 20
2042892	Lead	0.825	Spike	P	0 - 20
2042892	Nickel	1.57	Spike	P	0 - 20
2042892	Silver	1.20	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042501	Chloride	0.126	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355364

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042719	Chloride	0.0541	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042501	Sulfate	0.456	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042719	Sulfate	0.526	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355160

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2041606	Ammonia-N	1.29	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042752	Ammonia-N	1.69	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042508	Kjeldahl Nitrogen	1.21	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355122

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042758	Kjeldahl Nitrogen	1.24	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042506	NO2NO3-N	0.314	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042758	NO2NO3-N	0.473	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042535	Total-P	0.508	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042722	Total-P	3.45	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042512	O-Phosphate-P	2.15	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P354993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042761	O-Phosphate-P	0.698	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P354744

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042354	2,4-D	3.35	Spike	P	0 - 30
2042354	Acetaminophen	2.12	Spike	P	0 - 30
2042354	Bentazon	9.54	Spike	P	0 - 30
2042354	Carbamazepine	4.66	Spike	P	0 - 30
2042354	Diuron	3.84	Spike	P	0 - 30
2042354	Fenuron	3.73	Spike	P	0 - 30
2042354	Fluridone	15.6	Spike	P	0 - 30
2042354	Hydrocodone	0.769	Spike	P	0 - 30
2042354	Ibuprofen	9.96	Spike	P	0 - 30
2042354	Imazapyr	11.1	Spike	P	0 - 30
2042354	Imidacloprid	0.375	Spike	P	0 - 30
2042354	Linuron	0.0690	Spike	P	0 - 30
2042354	MCPP	7.96	Spike	P	0 - 30
2042354	Naproxen	18.4	Spike	P	0 - 30
2042354	Primidone	3.13	Spike	P	0 - 30
2042354	Pyraclostrobin	0.156	Spike	P	0 - 30
2042354	Triclopyr	8.41	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P354971

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
--------------------------	-----------	-----------	-------------------	-----------	----------------

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P354971

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042005	Acesulfame K	4.13	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P355085

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042005	Sucralose	16.6	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P355003

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042502	Color (true)	2.69	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P355004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042757	Color (true)	2.84	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P355190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042533	Total Alkalinity	0.00789	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P355235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042501	TDS	1.26	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P355236

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042833	TDS	9.39	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P355193

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042533	Fluoride	0.463	Spike	P	0 - 3.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P355171

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042318	Organic Carbon	0.573	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P355172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2042722	Organic Carbon	1.78	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 Surrogates

Lab Sample ID: 2042738
Field Sample ID: 20030596

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	97.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	67.7	P	30 - 160
EPA 8321B	Diuron-d6	74.1	P	30 - 160
EPA 8321B	Endothall-d6	82.3	P	40 - 160
EPA 8321B	Endothall-d6	82.3	P	40 - 160
EPA 8321B	Ibuprofen-d3	80.3	P	30 - 160
EPA 8321B	Primidone-d5	47.9	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	40 - 160
EPA 8321B	Sucralose-d6	104	P	40 - 160

Lab Sample ID: 2042739
Field Sample ID: 20030595

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	77.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.8	P	30 - 160
EPA 8321B	Diuron-d6	73.9	P	30 - 160
EPA 8321B	Endothall-d6	95.4	P	40 - 160
EPA 8321B	Endothall-d6	95.4	P	40 - 160
EPA 8321B	Ibuprofen-d3	80.7	P	30 - 160
EPA 8321B	Primidone-d5	31.4	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	40 - 160
EPA 8321B	Sucralose-d6	102	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A87896

Included Lab Sample IDs: 2042717, 2042718, 2042723, 2042724, 2042727

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	98.8	P/P	90 - 110
O-Phosphate-P	98.8	98.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A87897

Included Lab Sample IDs: 2042713, 2042714, 2042719, 2042720, 2042725

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

Reference Method: SM 2120 B

Run ID: A87898

Included Lab Sample IDs: 2042713, 2042714, 2042719, 2042720, 2042725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.3	99.6	P/P	85 - 115
Color (true)	99.6	99.4	P/P	85 - 115

Reference Method: EPA 8321B

Run ID: A87945

Included Lab Sample IDs: 2042738, 2042739

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	112	81.8	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87950

Included Lab Sample IDs: 2042716

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.7	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87959

Included Lab Sample IDs: 2042715, 2042721, 2042722, 2042726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.8	P/P	90 - 110
Total-P	99.8	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A87965

Included Lab Sample IDs: 2042715, 2042716

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.1	93.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A87980

Included Lab Sample IDs: 2042715, 2042716, 2042721, 2042722, 2042726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	98.6	P/P	90 - 110
Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A87982

Included Lab Sample IDs: 2042740, 2042741, 2042742, 2042743, 2042744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	99.7	P/P	90 - 110
Calcium	99.7	101	P/P	90 - 110
Iron	102	98.3	P/P	90 - 110
Iron	98.3	99.5	P/P	90 - 110
Magnesium	102	98.2	P/P	90 - 110
Magnesium	98.2	99.2	P/P	90 - 110
Potassium	102	98.4	P/P	90 - 110
Potassium	98.4	99.5	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Sodium	103	100	P/P	90 - 110
Zinc	93.1	98.9	P/P	90 - 110
Zinc	98.9	91.4	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A87989

Included Lab Sample IDs: 2042715, 2042716, 2042721, 2042722, 2042726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.7	96.0	P/P	90 - 110
Organic Carbon	96.0	95.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A87993

Included Lab Sample IDs: 2042713, 2042714, 2042719, 2042720, 2042725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Chloride	99.3	99.4	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110
Sulfate	99.4	100	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A87997

Included Lab Sample IDs: 2042713, 2042714, 2042719, 2042720, 2042725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A87997

Included Lab Sample IDs: 2042713, 2042714, 2042719, 2042720, 2042725

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A87997

Included Lab Sample IDs: 2042713, 2042714, 2042719, 2042720, 2042725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A88004

Included Lab Sample IDs: 2042721, 2042722, 2042726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A88012

Included Lab Sample IDs: 2042738, 2042739

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	107	98.4	P/P	50 - 150
2,4-D	114	107	P/P	50 - 150
Acetaminophen	109	114	P/P	60 - 160
Acetaminophen	114	118	P/P	60 - 160
Bentazon	112	119	P/P	50 - 160
Bentazon	119	118	P/P	50 - 160
Carbamazepine	104	118	P/P	60 - 160
Carbamazepine	118	110	P/P	60 - 160
Diuron	98.4	99.7	P/P	60 - 150
Diuron	99.7	103	P/P	60 - 150
Fenuron	105	115	P/P	60 - 150
Fenuron	115	111	P/P	60 - 150
Fluridone	112	91.2	P/P	60 - 160
Fluridone	91.2	119	P/P	60 - 160
Hydrocodone	100	119	P/P	60 - 150
Hydrocodone	119	108	P/P	60 - 150
Ibuprofen	82.5	83.4	P/P	50 - 160
Ibuprofen	83.4	97.4	P/P	50 - 160
Imazapyr	90.0	94.4	P/P	50 - 150
Imazapyr	91.4	90.0	P/P	50 - 150
Imidacloprid	105	109	P/P	60 - 160
Imidacloprid	109	102	P/P	60 - 160
Linuron	90.1	99.4	P/P	60 - 150
Linuron	99.4	108	P/P	60 - 150
MCP	114	99.3	P/P	50 - 150
MCP	88.4	114	P/P	50 - 150
Naproxen	73.2	87.8	P/P	50 - 160
Naproxen	91.6	73.2	P/P	50 - 160
Primidone	107	154	P/P	60 - 160
Primidone	154	105	P/P	60 - 160
Pyraclostrobin	104	65.1	P/P	60 - 150
Pyraclostrobin	65.1	150	P/P	60 - 150
Triclopyr	96.0	95.5	P/P	50 - 160
Triclopyr	96.3	96.0	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A88017

Included Lab Sample IDs: 2042715, 2042716, 2042721, 2042722, 2042726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	101	98.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A88023

Included Lab Sample IDs: 2042738, 2042739

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	78.5	85.6	P/P	60 - 160
Sucralose	85.6	80.1	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A88076

Included Lab Sample IDs: 2042740, 2042741, 2042742, 2042743, 2042744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	102	101	P/P	90 - 110
Arsenic	99.9	102	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Chromium	101	104	P/P	90 - 110
Chromium	104	105	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Copper	99.8	102	P/P	90 - 110
Lead	101	102	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Nickel	100	102	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Silver	96.1	97.5	P/P	90 - 110
Silver	97.5	97.1	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A88262

Included Lab Sample IDs: 2042743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cadmium	102	102	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						0.847	
	Turbidity						3.59	
EPA 200.7 Rev. 4.4	Calcium	96.3	96.1	97.3				0.644
	Iron	98.5	101	95.5	94.4			0.922
	Magnesium	101	95.1	97.9	96.1			1.02
	Potassium	96.7	98.9	93.9	93.4			0.444
	Sodium	96.1	98.0	96.8				0.0570
	Zinc	94.0	93.9	90.3	88.0			2.58
EPA 200.8 Rev. 5.4	Arsenic	103	103	105	104			1.54
	Cadmium	105	107	108	108			0.748
	Chromium	103	104	106	105			0.795
	Copper	101	97.5	98.5	97.5			1.06
	Lead	99.1	100	103	102			0.825
	Nickel	101	98.1	96.2	94.7			1.57
	Silver	97.8	98.5	99.2	98.0			1.20
EPA 300.0 Rev. 2.1	Chloride	98.6	94.6				0.126	
	Chloride	98.3	96.2	97.3			0.0541	
	Sulfate	98.9	98.2	95.7			0.456	
	Sulfate	99.4	97.1	101			0.526	
EPA 350.1 Rev. 2.0	Ammonia-N	97.7	98.5	100				1.29
	Ammonia-N	95.7	100	98.2				1.69
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	99.4	97.9				1.21
	Kjeldahl Nitrogen	103	101	99.6				1.24
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	101				0.314
	NO2NO3-N	100	100	101				0.473
EPA 365.1 Rev. 2.0	Total-P	103	102	102				0.508
	Total-P	97.1	97.8	102				3.45
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.9	95.3	97.5				2.15
	O-Phosphate-P	102	99.9	101				0.698
EPA 8321B	2,4-D	79.9	103	99.6				3.35
	Acesulfame K	94.5	137	131				4.13
	Acetaminophen	96.2	114	117				2.12
	Bentazon	83.4	45.6	50.4				9.54
	Carbamazepine	74.3	75.5	79.1				4.66
	Diuron	68.8	66.9	69.6				3.84
	Fenuron	84.7	79.6	82.6				3.73
	Fluridone	94.8	88.3	103				15.6
	Hydrocodone	85.3	80.1	80.7				0.769
	Ibuprofen	70.3	90.2	81.7				9.96
	Imazapyr	74.2	92.9	82.5				11.1
	Imidacloprid	97.6	131	131				0.375
	Linuron	58.2	64.7	64.6				0.0690
	MCPP	96.8	142	131				7.96
	Naproxen	81.4	86.2	71.7				18.4
	Primidone	64.0	70.7	72.9				3.13
	Pyraclostrobin	71.8	51.6	51.7				0.156
	Sucralose	97.8	85.2	101				16.6
	Triclopyr	60.6	97.7	89.9				8.41
SM 2120 B	Color (true)	99.5					2.69	
	Color (true)	97.7					2.84	
SM 2320 B-97	Total Alkalinity	101					0.0078	
SM 2540 C-97	TDS						1.26	
	TDS						9.39	
SM 4500 F-C-97	Fluoride	103	101	102				0.463

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 5310 B-00	Organic Carbon	97.6	109			0.573
	Organic Carbon	95.4	95.4	93.0		1.78

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2042713, 2042714, 2042719, 2042720, 2042725
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2042740, 2042741, 2042742, 2042743, 2042744
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2042740, 2042741, 2042742, 2042743, 2042744
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2042713, 2042714, 2042719, 2042720, 2042725
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2042713, 2042714, 2042719, 2042720, 2042725
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2042715, 2042716, 2042721, 2042722, 2042726
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2042715, 2042716, 2042721, 2042722, 2042726
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2042715, 2042716, 2042721, 2042722, 2042726
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2042715, 2042716, 2042721, 2042722, 2042726
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2042717, 2042718, 2042723, 2042724, 2042727
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2042738, 2042739
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2042738, 2042739
SM 2120 B / E31780	True Color measured at 450 nm	2042713, 2042714, 2042719, 2042720, 2042725
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2042713, 2042714, 2042719, 2042720, 2042725
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2042713, 2042714, 2042719, 2042720, 2042725
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2042713, 2042714, 2042719, 2042720, 2042725
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2042713, 2042714, 2042719, 2042720, 2042725
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2042715, 2042716, 2042721, 2042722, 2042726

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	11/20/2018			11/20/2018 16:59	Megan Treadwell	2042713, 2042714, 2042719, 2042720, 2042725
EPA 200.7 Rev. 4.4	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/27/2018 18:38	Betina Topolski	2042744
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/27/2018 19:20	Betina Topolski	2042740
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/27/2018 19:50	Betina Topolski	2042741
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/27/2018 19:57	Betina Topolski	2042742
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/27/2018 20:05	Betina Topolski	2042743
EPA 200.8 Rev. 5.4	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/29/2018 18:38	Allison Taylor	2042744
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/29/2018 21:03	Allison Taylor	2042740
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/29/2018 21:12	Allison Taylor	2042741
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/29/2018 21:22	Allison Taylor	2042742
	11/20/2018	11/26/2018 14:15	Elliott D. Healy	11/29/2018 21:31	Allison Taylor	2042743
EPA 300.0 Rev. 2.1	11/20/2018	11/26/2018 14:15	Elliott D. Healy	12/07/2018 17:16	Allison Taylor	2042743
	11/20/2018			11/29/2018 16:42	Lipi Saha	2042713
	11/20/2018			11/29/2018 21:55	Lipi Saha	2042719
	11/20/2018			11/29/2018 22:44	Lipi Saha	2042714
	11/20/2018			11/29/2018 22:56	Lipi Saha	2042720
EPA 350.1 Rev. 2.0	11/20/2018			11/29/2018 23:08	Lipi Saha	2042725
	11/20/2018			11/26/2018 14:20	Ping Hua	2042715
	11/20/2018			11/26/2018 14:28	Ping Hua	2042716
	11/20/2018			11/26/2018 14:29	Ping Hua	2042721
	11/20/2018			11/26/2018 14:35	Ping Hua	2042722
EPA 351.2 Rev. 2.0	11/20/2018			11/26/2018 14:40	Ping Hua	2042726
	11/20/2018	11/26/2018 16:00	Adrian Shelby	11/27/2018 10:27	Joseph Suarez	2042715
	11/20/2018	11/26/2018 16:00	Adrian Shelby	11/27/2018 10:28	Joseph Suarez	2042716
	11/20/2018	11/27/2018 12:30	Adrian Shelby	11/28/2018 10:03	Joseph Suarez	2042721
	11/20/2018	11/27/2018 12:30	Adrian Shelby	11/28/2018 10:04	Joseph Suarez	2042722
EPA 353.2 Rev. 2.0	11/20/2018	11/27/2018 12:30	Adrian Shelby	11/28/2018 10:06	Joseph Suarez	2042726
	11/20/2018			11/28/2018 12:44	Lauren Bottorf	2042716
	11/20/2018			11/28/2018 12:45	Lauren Bottorf	2042721
	11/20/2018			11/28/2018 12:46	Lauren Bottorf	2042722
	11/20/2018			11/28/2018 12:59	Lauren Bottorf	2042726
EPA 365.1 Rev. 2.0	11/20/2018			11/28/2018 14:45	Lauren Bottorf	2042715
	11/20/2018	11/21/2018 13:00	Sima Feizi	11/26/2018 11:22	Beverly Y. Sanders	2042716
	11/20/2018	11/21/2018 13:00	Sima Feizi	11/26/2018 15:12	Beverly Y. Sanders	2042715
	11/20/2018	11/21/2018 13:00	Sima Feizi	11/26/2018 15:13	Beverly Y. Sanders	2042721
	11/20/2018	11/21/2018 13:00	Sima Feizi	11/26/2018 15:21	Beverly Y. Sanders	2042726
EPA 365.1 Rev. 2.0 dissolved	11/20/2018	11/21/2018 13:00	Sima Feizi	11/26/2018 15:24	Beverly Y. Sanders	2042722
	11/20/2018			11/20/2018 15:01	Jhamieka S. Greenwood	2042727
	11/20/2018			11/20/2018 15:07	Jhamieka S. Greenwood	2042717

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0 dissolved	11/20/2018			11/20/2018 15:08	Jhamieka S. Greenwood	2042718
	11/20/2018			11/20/2018 15:09	Jhamieka S. Greenwood	2042723
	11/20/2018			11/20/2018 15:16	Jhamieka S. Greenwood	2042724
EPA 8321B	11/20/2018	11/21/2018 07:30	Rebecca Ware	11/21/2018 13:03	Rebecca Ware	2042738
	11/20/2018	11/21/2018 07:30	Rebecca Ware	11/21/2018 13:30	Rebecca Ware	2042739
	11/20/2018	11/21/2018 07:30	Rebecca Ware	11/28/2018 10:37	Rebecca Ware	2042738
	11/20/2018	11/21/2018 07:30	Rebecca Ware	11/28/2018 11:05	Rebecca Ware	2042739
	11/20/2018	11/21/2018 10:00	Hoor Shaik	11/28/2018 06:11	Juyoung Kim	2042738
	11/20/2018	11/21/2018 10:00	Hoor Shaik	11/28/2018 06:44	Juyoung Kim	2042739
SM 2120 B	11/20/2018			11/20/2018 15:17	Chelsea Hernandez	2042713
	11/20/2018			11/20/2018 15:20	Chelsea Hernandez	2042714
	11/20/2018			11/20/2018 15:21	Chelsea Hernandez	2042719
	11/20/2018			11/20/2018 15:22	Chelsea Hernandez	2042720
	11/20/2018			11/20/2018 15:23	Chelsea Hernandez	2042725
SM 2320 B-97	11/20/2018			11/27/2018 13:58	Dale L. Simmons	2042713
	11/20/2018			11/27/2018 14:08	Dale L. Simmons	2042714
	11/20/2018			11/27/2018 14:19	Dale L. Simmons	2042719
	11/20/2018			11/27/2018 14:29	Dale L. Simmons	2042720
	11/20/2018			11/27/2018 14:42	Dale L. Simmons	2042725
SM 2540 C-97	11/20/2018			11/21/2018 16:40	Blanca Fach	2042713, 2042714, 2042719, 2042720, 2042725
SM 2540 D-97	11/20/2018			11/21/2018 16:40	Blanca Fach	2042713, 2042714, 2042719, 2042720, 2042725
SM 4500 F-C-97	11/20/2018			11/27/2018 13:58	Dale L. Simmons	2042713
	11/20/2018			11/27/2018 14:08	Dale L. Simmons	2042714
	11/20/2018			11/27/2018 14:19	Dale L. Simmons	2042719
	11/20/2018			11/27/2018 14:29	Dale L. Simmons	2042720
	11/20/2018			11/27/2018 14:42	Dale L. Simmons	2042725
SM 5310 B-00	11/20/2018			11/21/2018 21:01	Megan Treadwell	2042715
	11/20/2018			11/21/2018 21:14	Megan Treadwell	2042716
	11/20/2018			11/21/2018 21:27	Megan Treadwell	2042721
	11/20/2018			11/21/2018 22:08	Megan Treadwell	2042722
	11/20/2018			11/21/2018 23:29	Megan Treadwell	2042726