

Chemical Analysis Report

NE-DIST-2018-06-06-01

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

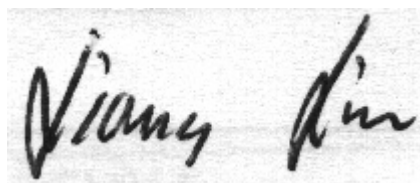
Event Description: **LSJR Downtown Fresh**
Request ID: **RQ-2018-06-04-29**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 28-JUN-2018 15:02

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored 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: Blockhouse 100m abv Irma Rd.

Collection Date/Time: 06/05/2018 09:25

Field ID: G2NE1159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998235	EPA 180.1 Rev. 2.0	Turbidity	110		NTU	P346504	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P346892	
		Sulfate	8.7		mg SO4/L	P346895	
		Color (true)	170		PCU	P346505	
	SM 2320 B-97	Total Alkalinity	53		mg CaCO3/L	P346910	
	SM 2540 C-97	TDS	192		mg/L	P347015	
	SM 2540 D-97	TSS	22		mg/L	P347022	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P346911	
1998237	EPA 350.1 Rev. 2.0	Ammonia-N	0.13		mg N/L	P347006	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P347096	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.086		mg N/L	P346686	
	EPA 365.1 Rev. 2.0	Total-P	0.24		mg P/L	P346814	
	SM 5310 B-00	Organic Carbon	22		mg C/L	P346789	
1998239	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.063		mg P/L	P346528	
1998281	EPA 8321B	2,4-D	0.11		ug/L	P346478	
		Bentazon	0.012		ug/L	P346478	
		MCP	0.040		ug/L	P346478	
		Triclopyr**	0.0040	U	ug/L	P346478	
		Imidacloprid	0.038		ug/L	P346478	MS
		Diuron	0.0020	U	ug/L	P346478	
		Pyraclostrobin**	0.0020	U	ug/L	P346478	
		Primidone**	0.0040	U	ug/L	P346478	
		Linuron	0.0040	U	ug/L	P346478	
		Acetaminophen**	0.0080	U	ug/L	P346478	
		Fenuron	0.016	U	ug/L	P346478	
		Imazapyr**	0.13		ug/L	P346478	
		Carbamazepine**	0.0017		ug/L	P346478	
		Fluridone**	0.0011	I	ug/L	P346478	
		Hydrocodone**	8.0E-04	U	ug/L	P346478	
		Sucralose**	0.17		ug/L	P346468	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: 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.

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Hogans CR at Broad St.

Collection Date/Time: 06/05/2018 08:40

Field ID: 20030729

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998236	EPA 180.1 Rev. 2.0	Turbidity	4.4		NTU	P346504	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P346892	
		Sulfate	51		mg SO4/L	P346895	
	SM 2120 B	Color (true)	25	A	PCU	P346503	
	SM 2320 B-97	Total Alkalinity	166		mg CaCO3/L	P346910	
	SM 2540 C-97	TDS	257		mg/L	P347015	
	SM 2540 D-97	TSS	3	I	mg/L	P347022	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P346911	
1998238	EPA 350.1 Rev. 2.0	Ammonia-N	0.23		mg N/L	P347006	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P347096	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P346686	
	EPA 365.1 Rev. 2.0	Total-P	0.084		mg P/L	P346814	
	SM 5310 B-00	Organic Carbon	0.64	I	mg C/L	P346789	
1998240	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.040		mg P/L	P346528	
1998282	EPA 8321B	2,4-D	0.10		ug/L	P346478	
		Bentazon	0.030		ug/L	P346478	
		MCP	0.0025	I	ug/L	P346478	
		Triclopyr**	0.0040	U	ug/L	P346478	
		Imidacloprid	0.069		ug/L	P346478	MS
		Diuron	0.0041	I	ug/L	P346478	
		Pyraclostrobin**	0.0020	U	ug/L	P346478	
		Primidone**	0.0040	U	ug/L	P346478	
		Linuron	0.0040	U	ug/L	P346478	
		Acetaminophen**	0.11		ug/L	P346478	
		Fenuron	0.016	U	ug/L	P346478	
		Imazapyr**	0.14		ug/L	P346478	
		Carbamazepine**	6.1E-04	I	ug/L	P346478	
		Fluridone**	0.0021		ug/L	P346478	
		Hydrocodone**	8.0E-04	U	ug/L	P346478	
		Sucralose**	0.15		ug/L	P346523	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: 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.

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Trout River at Ramallah Rd

Collection Date/Time: 06/05/2018 11:50

Field ID: 20030752

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998241	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P346504	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P346892	
		Sulfate	10		mg SO4/L	P346895	
		Color (true)	390		PCU	P346503	
	SM 2320 B-97	Total Alkalinity	4.7		mg CaCO3/L	P346910	
	SM 2540 C-97	TDS	100		mg/L	P347011	
	SM 2540 D-97	TSS	3	I	mg/L	P347023	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P346911	
1998243	EPA 350.1 Rev. 2.0	Ammonia-N	0.052		mg N/L	P347162	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P347096	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P346686	
	EPA 365.1 Rev. 2.0	Total-P	0.074		mg P/L	P346814	
	SM 5310 B-00	Organic Carbon	33		mg C/L	P346789	
1998245	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.050		mg P/L	P346531	
1998285	EPA 200.7 Rev. 4.4	Calcium	6.81		mg/L	P346578	
		Iron	1.08E+03		ug/L	P346578	
		Magnesium	2.08		mg/L	P346578	
		Potassium	3.0		mg/L	P346578	
		Sodium	9.8		mg/L	P346578	
		Zinc	6.7	I	ug/L	P346578	
	EPA 200.8 Rev. 5.4	Arsenic	0.91		ug/L	P346578	
		Cadmium	0.020	U	ug/L	P346578	
		Chromium	0.70	I	ug/L	P346578	
		Copper	0.64	I	ug/L	P346578	
		Lead	1.03		ug/L	P346886	
		Nickel	0.77	I	ug/L	P346578	
		Silver	0.010	U	ug/L	P347286	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: 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.

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 06/22/2018.

Sample Location: Trout River at Garden St

Collection Date/Time: 06/05/2018 11:20

Field ID: 20030751

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998242	EPA 180.1 Rev. 2.0	Turbidity	4.0		NTU	P346504	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P346892	
		Sulfate	7.9		mg SO4/L	P346895	
	SM 2120 B	Color (true)	320		PCU	P346503	
	SM 2320 B-97	Total Alkalinity	17		mg CaCO3/L	P346910	
	SM 2540 C-97	TDS	111		mg/L	P347013	
	SM 2540 D-97	TSS	5	I	mg/L	P347023	
	SM 4500 F-C-97	Fluoride	0.039	I	mg F/L	P346911	
1998244	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P347006	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P347096	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.089		mg N/L	P346686	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P346970	
	SM 5310 B-00	Organic Carbon	27		mg C/L	P346717	
1998246	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.048		mg P/L	P346531	
1998286	EPA 200.7 Rev. 4.4	Calcium	10.9		mg/L	P346578	
		Iron	940		ug/L	P346578	
		Magnesium	2.02		mg/L	P346578	
		Potassium	2.3		mg/L	P346578	
		Sodium	10.7		mg/L	P346578	
		Zinc	6.8	I	ug/L	P346578	
	EPA 200.8 Rev. 5.4	Arsenic	0.81		ug/L	P346578	
		Cadmium	0.020	U	ug/L	P346578	
		Chromium	0.60	I	ug/L	P346578	
		Copper	0.61	I	ug/L	P346578	
		Lead	0.83		ug/L	P346886	
		Nickel	0.61	I	ug/L	P346578	
		Silver	0.010	U	ug/L	P347286	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: 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: Blockhouse CR @ Duval Rd

Collection Date/Time: 06/05/2018 09:50

Field ID: 20030746

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998283	EPA 8321B	2,4-D	0.16		ug/L	P346521	
		Bentazon	0.011		ug/L	P346521	
		MCP	0.056		ug/L	P346521	
		Triclopyr**	0.0040	U	ug/L	P346521	
		Imidacloprid	0.039		ug/L	P346521	
		Diuron	0.0020	U	ug/L	P346521	
		Pyraclostrobin**	0.0020	U	ug/L	P346521	MS, RPD
		Primidone**	0.0040	U	ug/L	P346521	
		Linuron	0.0040	U	ug/L	P346521	
		Acetaminophen**	0.0080	U	ug/L	P346521	
		Fenuron	0.016	U	ug/L	P346521	
		Imazapyr**	0.058		ug/L	P346521	
		Carbamazepine**	4.0E-04	U	ug/L	P346521	
		Fluridone**	0.0011	I	ug/L	P346521	
		Hydrocodone**	8.0E-04	U	ug/L	P346521	
		Sucralose**	0.081		ug/L	P346523	

Ref. Method and Comment:

EPA 8321B: MS accuracy for imazapyr and fluridone could not be assessed due to high concentration of parameter in the spiked sample. Results confirmed in re-analysis.

Sample Location: Blockhouse CR @ Duval Rd

Collection Date/Time: 06/05/2018 09:55

Field ID: 20030746DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998284	EPA 8321B	2,4-D	0.15		ug/L	P346521	
		Bentazon	0.010		ug/L	P346521	
		MCP	0.048		ug/L	P346521	
		Triclopyr**	0.0040	U	ug/L	P346521	
		Imidacloprid	0.037		ug/L	P346521	
		Diuron	0.0020	U	ug/L	P346521	
		Pyraclostrobin**	0.0020	U	ug/L	P346521	MS, RPD
		Primidone**	0.0040	U	ug/L	P346521	
		Linuron	0.0040	U	ug/L	P346521	
		Acetaminophen**	0.0080	U	ug/L	P346521	
		Fenuron	0.016	U	ug/L	P346521	
		Imazapyr**	0.048		ug/L	P346521	
		Carbamazepine**	4.0E-04	U	ug/L	P346521	
		Fluridone**	4.9E-04	I	ug/L	P346521	
		Hydrocodone**	8.0E-04	U	ug/L	P346521	
		Sucralose**	0.086		ug/L	P346523	

Ref. Method and Comment:

EPA 8321B: MS accuracy for imazapyr and fluridone could not be assessed due to high concentration of parameter in the spiked sample. Results confirmed in re-analysis.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P346504

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P346578

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: P346578

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
Nickel	0.20	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Component	Result	Code	Units
Lead	0.050	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Component	Result	Code	Units
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346892

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346895

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347006

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347162

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347096

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346686

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346814

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346970

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346528

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346531

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

Reference Method: EPA 8321B
Batch ID: P346468

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P346478

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	4.0E-04	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P346478

Component	Result	Code	Units
Diuron	0.0020	U	ug/L
Fenuron	0.039	I	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	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
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P346521

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	4.0E-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
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	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: P346523

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P346503

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P346505

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P346910

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

Reference Method: SM 2540 C-97
Batch ID: P347011

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P347013

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P347015

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P347022

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P347023

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P346911

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P346717

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

Reference Method: SM 5310 B-00
Batch ID: P346789

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: P346578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	104		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	102		P	85 - 115
Sodium	106		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	102		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	100		P	85 - 115
Copper	97.7		P	85 - 115
Nickel	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Lead	98.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silver	95.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347006

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347162

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347096

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346686

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: P346814

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346970

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: P346528

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346531

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

Reference Method: EPA 8321B
Batch ID: P346468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	82.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P346478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	88.9		P	40 - 150
Acetaminophen	114		P	30 - 150
Bentazon	86.5		P	30 - 150
Carbamazepine	103		P	40 - 150
Diuron	74.5		P	40 - 150
Fenuron	107		P	40 - 150
Fluridone	88.5		P	40 - 150
Hydrocodone	97.6		P	40 - 150
Imazapyr	87.9		P	40 - 150
Imidacloprid	123		P	40 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P346478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Linuron	77.4		P	40 - 150
MCPP	91.5		P	40 - 150
Primidone	105		P	40 - 150
Pyraclostrobin	97.2		P	40 - 150
Triclopyr	93.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P346521

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	82.4		P	40 - 150
Acetaminophen	101		P	30 - 150
Bentazon	87.4		P	30 - 150
Carbamazepine	113		P	40 - 150
Diuron	85.2		P	40 - 150
Fenuron	104		P	40 - 150
Fluridone	92.0		P	40 - 150
Hydrocodone	95.0		P	40 - 150
Imazapyr	85.7		P	40 - 150
Imidacloprid	119		P	40 - 160
Linuron	83.4		P	40 - 150
MCPP	94.8		P	40 - 150
Primidone	111		P	40 - 150
Pyraclostrobin	99.5		P	40 - 150
Triclopyr	94.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P346523

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	122		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P346910

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P346911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.2		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P346717

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.1		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P346789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P346578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998151	Calcium	102		P	80 - 120
1998151	Iron	106		P	80 - 120
1998151	Magnesium	101		P	80 - 120
1998151	Potassium	108		P	80 - 120
1998151	Sodium	109		P	80 - 120
1998151	Zinc	105		P	80 - 120
1998153	Calcium	100		P	80 - 120
1998153	Iron	103	104	P/P	80 - 120
1998153	Magnesium	100		P	80 - 120
1998153	Potassium	103	104	P/P	80 - 120
1998153	Sodium	102	105	P/P	80 - 120
1998153	Zinc	97.4	98.8	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998151	Arsenic	101		P	80 - 120
1998151	Cadmium	101		P	80 - 120
1998151	Chromium	99.3		P	80 - 120
1998151	Copper	95.3		P	80 - 120
1998151	Nickel	98.6		P	80 - 120
1998153	Arsenic	102	101	P/P	80 - 120
1998153	Cadmium	101	100	P/P	80 - 120
1998153	Chromium	102	101	P/P	80 - 120
1998153	Copper	95.0	94.5	P/P	80 - 120
1998153	Nickel	97.6	97.5	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1989807	Lead	101	101	P/P	80 - 120
1998151	Lead	99.3		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998096	Silver	103		P	80 - 120
1998150	Silver	104	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998107	Chloride	98.7		P	90 - 110
1998236	Chloride	93.9		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998107	Sulfate	98.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998204	Ammonia-N	96.8	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347162

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998383	Ammonia-N	98.1	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347096

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998238	Kjeldahl Nitrogen	101	96.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998237	NO2NO3-N	98.1	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998238	Total-P	97.5	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998327	Total-P	98.8	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346531

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998222	O-Phosphate-P	92.7	94.6	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P346468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998021	Sucralose	83.8	82.7	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P346478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998146	2,4-D	55.0	68.1	P/P	40 - 150
1998146	Acetaminophen	101	114	P/P	30 - 150
1998146	Bentazon	59.5	67.8	P/P	30 - 150
1998146	Carbamazepine	61.7	67.3	P/P	40 - 150
1998146	Diuron	43.4	44.9	P/P	40 - 150
1998146	Fenuron	73.9	80.6	P/P	40 - 150
1998146	Fluridone	67.4	65.8	P/P	40 - 150
1998146	Hydrocodone	92.1	93.0	P/P	40 - 150
1998146	Imazapyr	91.2	102	P/P	40 - 150
1998146	Imidacloprid	160	188	P/F	40 - 160
1998146	Linuron	53.0	52.2	P/P	40 - 150
1998146	MCP	108	109	P/P	40 - 150
1998146	Primidone	118	123	P/P	40 - 150
1998146	Pyraclostrobin	59.0	56.8	P/P	40 - 150
1998146	Triclopyr	105	113	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P346521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998488	Acetaminophen	93.5	82.9	P/P	30 - 150
1998488	Carbamazepine	61.8	55.7	P/P	40 - 150
1998488	Diuron	56.7	47.1	P/P	40 - 150
1998488	Fenuron	63.7	58.6	P/P	40 - 150
1998488	Hydrocodone	75.6	65.0	P/P	40 - 150
1998488	Imidacloprid	116	99.1	P/P	40 - 160
1998488	Linuron	59.1	46.1	P/P	40 - 150
1998488	Primidone	81.1	75.2	P/P	40 - 150
1998488	Pyraclostrobin	75.9	22.5	P/F	40 - 150
1998568	2,4-D	115	114	P/P	40 - 150
1998568	Bentazon	30.3	30.9	P/P	30 - 150
1998568	MCP	123	133	P/P	40 - 150
1998568	Triclopyr	145	127	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P346523

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998282	Sucralose	88.3	117	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P346911

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998168	Fluoride	98.2	97.5	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P346717

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998244	Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P346504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998167	Turbidity	7.04	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P346578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998153	Calcium	1.15	Spike	P	0 - 20
1998153	Iron	1.02	Spike	P	0 - 20
1998153	Magnesium	1.54	Spike	P	0 - 20
1998153	Potassium	1.62	Spike	P	0 - 20
1998153	Sodium	1.16	Spike	P	0 - 20
1998153	Zinc	1.41	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998153	Arsenic	0.943	Spike	P	0 - 20
1998153	Cadmium	1.16	Spike	P	0 - 20
1998153	Chromium	0.432	Spike	P	0 - 20
1998153	Copper	0.551	Spike	P	0 - 20
1998153	Nickel	0.179	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1989807	Lead	0.511	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998150	Silver	0.247	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998107	Chloride	2.54	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346895

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: P346895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998107	Sulfate	3.27	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998204	Ammonia-N	1.26	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998383	Ammonia-N	0.600	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347096

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998238	Kjeldahl Nitrogen	3.11	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998237	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998238	Total-P	0.890	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998327	Total-P	1.36	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998123	O-Phosphate-P	0.444	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346531

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998222	O-Phosphate-P	1.94	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P346468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998021	Sucralose	1.34	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P346478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998146	2,4-D	9.61	Spike	P	0 - 30
1998146	Acetaminophen	11.7	Spike	P	0 - 30
1998146	Bentazon	13.0	Spike	P	0 - 30
1998146	Carbamazepine	8.72	Spike	P	0 - 30
1998146	Diuron	1.72	Spike	P	0 - 30
1998146	Fenuron	8.73	Spike	P	0 - 30
1998146	Fluridone	2.33	Spike	P	0 - 30
1998146	Hydrocodone	1.02	Spike	P	0 - 30
1998146	Imazapyr	7.02	Spike	P	0 - 30
1998146	Imidacloprid	14.6	Spike	P	0 - 30
1998146	Linuron	1.49	Spike	P	0 - 30
1998146	MCP	0.875	Spike	P	0 - 30
1998146	Primidone	4.07	Spike	P	0 - 30
1998146	Pyraclostrobin	3.79	Spike	P	0 - 30
1998146	Triclopyr	7.72	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P346521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998488	Acetaminophen	11.9	Spike	P	0 - 30
1998488	Carbamazepine	10.2	Spike	P	0 - 30
1998488	Diuron	18.5	Spike	P	0 - 30
1998488	Fenuron	8.41	Spike	P	0 - 30
1998488	Fluridone	5.70	Spike	P	0 - 30
1998488	Hydrocodone	15.1	Spike	P	0 - 30
1998488	Imazapyr	10.3	Spike	P	0 - 30
1998488	Imidacloprid	10.8	Spike	P	0 - 30
1998488	Linuron	24.8	Spike	P	0 - 30
1998488	Primidone	7.54	Spike	P	0 - 30
1998488	Pyraclostrobin	109	Spike	F	0 - 30
1998568	2,4-D	0.678	Spike	P	0 - 30
1998568	Bentazon	1.82	Spike	P	0 - 30
1998568	MCP	7.80	Spike	P	0 - 30
1998568	Triclopyr	13.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P346523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998282	Sucralose	26.1	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P346503

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998236	Color (true)	4.38	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P346505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997716	Color (true)	1.64	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P346910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998168	Total Alkalinity	0.182	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P347011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997364	TDS	2.29	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P347013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997717	TDS	5.19	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P347015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998168	TDS	2.99	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P346911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998168	Fluoride	0.506	Spike	P	0 - 3.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P346717

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998244	Organic Carbon	0.749	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P346789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998063	Organic Carbon	0.319	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: 1998281
Field Sample ID: G2NE1159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	126	P	30 - 160
EPA 8321B	Acetaminophen-d4	92.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.5	P	30 - 160
EPA 8321B	Diuron-d6	46.9	P	30 - 160
EPA 8321B	Primidone-d5	77.1	P	30 - 160
EPA 8321B	Sucralose-d6	79.0	P	40 - 160

Lab Sample ID: 1998282
Field Sample ID: 20030729

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	121	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	64.0	P	30 - 160
EPA 8321B	Primidone-d5	128	P	30 - 160
EPA 8321B	Sucralose-d6	95.7	P	40 - 160

Lab Sample ID: 1998283
Field Sample ID: 20030746

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	132	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.6	P	30 - 160
EPA 8321B	Diuron-d6	44.1	P	30 - 160
EPA 8321B	Primidone-d5	63.3	P	30 - 160
EPA 8321B	Sucralose-d6	79.6	P	40 - 160

Lab Sample ID: 1998284
Field Sample ID: 20030746DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	122	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	60.9	P	30 - 160
EPA 8321B	Diuron-d6	52.6	P	30 - 160
EPA 8321B	Primidone-d5	65.1	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B
Run ID: A84395
Included Lab Sample IDs: 1998236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A84396
Included Lab Sample IDs: 1998235, 1998236, 1998241, 1998242

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

Reference Method: SM 2120 B
Run ID: A84397
Included Lab Sample IDs: 1998235, 1998241, 1998242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.7	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A84413
Included Lab Sample IDs: 1998239, 1998240, 1998245, 1998246

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.3	97.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A84472
Included Lab Sample IDs: 1998285, 1998286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.2	98.4	P/P	90 - 110
Iron	98.0	98.2	P/P	90 - 110
Magnesium	99.4	98.6	P/P	90 - 110
Potassium	99.7	99.0	P/P	90 - 110
Sodium	99.8	101	P/P	90 - 110
Zinc	99.3	97.9	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A84488
Included Lab Sample IDs: 1998281, 1998282, 1998283, 1998284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	84.3	95.1	P/P	50 - 150
2,4-D	90.2	86.4	P/P	50 - 150
Acetaminophen	144	143	P/P	60 - 160
Bentazon	104	114	P/P	50 - 150
Bentazon	113	112	P/P	50 - 150
Carbamazepine	151	95.1	P/P	60 - 160
Diuron	127	133	P/P	60 - 150
Fenuron	106	100	P/P	60 - 150
Fluridone	136	141	P/P	60 - 160
Hydrocodone	111	120	P/P	60 - 150
Imazapyr	105	114	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A84488

Included Lab Sample IDs: 1998281, 1998282, 1998283, 1998284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imidacloprid	109	117	P/P	60 - 150
Linuron	142	137	P/P	60 - 150
MCPP	108	95.2	P/P	50 - 150
MCPP	92.6	88.4	P/P	50 - 150
Primidone	135	131	P/P	60 - 150
Pyraclostrobin	133	124	P/P	60 - 150
Triclopyr	107	114	P/P	50 - 160
Triclopyr	97.9	88.9	P/P	50 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A84493

Included Lab Sample IDs: 1998237, 1998238, 1998243, 1998244

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A84497

Included Lab Sample IDs: 1998285, 1998286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.1	100	P/P	90 - 110
Cadmium	98.7	99.5	P/P	90 - 110
Chromium	99.9	101	P/P	90 - 110
Copper	97.7	97.6	P/P	90 - 110
Nickel	97.8	97.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A84498

Included Lab Sample IDs: 1998235, 1998236, 1998241, 1998242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	99.3	P/P	90 - 110
Chloride	105	102	P/P	90 - 110
Sulfate	102	96.7	P/P	90 - 110
Sulfate	108	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A84511

Included Lab Sample IDs: 1998244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	96.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A84524

Included Lab Sample IDs: 1998283, 1998284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	109	109	P/P	60 - 150
Carbamazepine	111	111	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A84524

Included Lab Sample IDs: 1998283, 1998284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	108	111	P/P	60 - 150
Fenuron	104	98.7	P/P	60 - 150
Hydrocodone	108	106	P/P	60 - 150
Imidacloprid	96.6	92.5	P/P	60 - 150
Linuron	106	104	P/P	60 - 150
Primidone	104	102	P/P	60 - 150
Pyraclostrobin	107	101	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A84525

Included Lab Sample IDs: 1998281, 1998282, 1998283, 1998284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	106	P/P	60 - 160
Sucralose	106	89.3	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A84530

Included Lab Sample IDs: 1998237, 1998238, 1998243

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	97.6	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A84586

Included Lab Sample IDs: 1998235, 1998236, 1998241, 1998242

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

Reference Method: SM 4500 F-C-97

Run ID: A84586

Included Lab Sample IDs: 1998235, 1998236, 1998241, 1998242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.2	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A84621

Included Lab Sample IDs: 1998237, 1998238, 1998243

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A84640

Included Lab Sample IDs: 1998237, 1998238, 1998244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A84640

Included Lab Sample IDs: 1998237, 1998238, 1998244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.7	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A84661

Included Lab Sample IDs: 1998244

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A84664

Included Lab Sample IDs: 1998285, 1998286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	99.4	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A84693

Included Lab Sample IDs: 1998243

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A84737

Included Lab Sample IDs: 1998237, 1998238, 1998243, 1998244

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

Reference Method: EPA 8321B

Run ID: A84801

Included Lab Sample IDs: 1998283, 1998284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	99.1	108	P/P	60 - 160
Imazapyr	129	119	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A84822

Included Lab Sample IDs: 1998285, 1998286

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	102	101	P/P	90 - 110
Silver	94.6	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							7.04	
EPA 200.7 Rev. 4.4	Calcium	101		102	100				1.15
	Iron	104		106	103	104			1.02
	Magnesium	102		101	100				1.54
	Potassium	102		108	103	104			1.62
	Sodium	106		109	102	105			1.16
	Zinc	101		105	97.4	98.8			1.41
EPA 200.8 Rev. 5.4	Arsenic	102		101	102	101			0.943
	Cadmium	101		101	101	100			1.16
	Chromium	100		99.3	102	101			0.432
	Copper	97.7		95.3	95.0	94.5			0.551
	Lead	98.5		101	101	99.3			0.511
	Nickel	100		98.6	97.6	97.5			0.179
	Silver	95.2		103	104	104			0.247
EPA 300.0 Rev. 2.1	Chloride	96.8		98.7	93.9			2.54	
	Sulfate	94.5		98.5				3.27	
EPA 350.1 Rev. 2.0	Ammonia-N	99.5		96.8	99.5				1.26
	Ammonia-N	102		98.1	98.7				0.600
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	93.0		101	96.0				3.11
EPA 353.2 Rev. 2.0	NO2NO3-N	100		98.1	98.1				0.0
EPA 365.1 Rev. 2.0	Total-P	96.7		97.5	96.5				0.890
	Total-P	101		98.8	97.3				1.36
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104							0.444
	O-Phosphate-P	98.5		92.7	94.6				1.94
EPA 8321B	2,4-D	88.9		55.0	68.1				9.61
	2,4-D	82.4		115	114				0.678
	Acetaminophen	114		101	114				11.7
	Acetaminophen	101		93.5	82.9				11.9
	Bentazon	86.5		59.5	67.8				13.0
	Bentazon	87.4		30.3	30.9				1.82
	Carbamazepine	103		61.7	67.3				8.72
	Carbamazepine	113		61.8	55.7				10.2
	Diuron	74.5		43.4	44.9				1.72
	Diuron	85.2		56.7	47.1				18.5
	Fenuron	107		73.9	80.6				8.73
	Fenuron	104		63.7	58.6				8.41
	Fluridone	88.5		67.4	65.8				2.33
	Fluridone	92.0							5.70
	Hydrocodone	97.6		92.1	93.0				1.02
	Hydrocodone	95.0		75.6	65.0				15.1
	Imazapyr	87.9		91.2	102				7.02
	Imazapyr	85.7							10.3
	Imidacloprid	123		160	188				14.6
	Imidacloprid	119		116	99.1				10.8
	Linuron	77.4		53.0	52.2				1.49
	Linuron	83.4		59.1	46.1				24.8
	MCPP	91.5		108	109				0.875
	MCPP	94.8		123	133				7.80
	Primidone	105		118	123				4.07
	Primidone	111		81.1	75.2				7.54
	Pyraclostrobin	97.2		59.0	56.8				3.79
	Pyraclostrobin	99.5		75.9	22.5				109
	Sucralose	82.3		83.8	82.7				1.34
	Sucralose	122		88.3	117				26.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Triclopyr	93.4	105	113			7.72
	Triclopyr	94.9	145	127			13.5
SM 2120 B	Color (true)					4.38	
	Color (true)					1.64	
SM 2320 B-97	Total Alkalinity	100				0.182	
SM 2540 C-97	TDS					2.29	
	TDS					5.19	
	TDS					2.99	
SM 4500 F-C-97	Fluoride	96.2	98.2	97.5			0.506
SM 5310 B-00	Organic Carbon	98.1	97.8				0.749
	Organic Carbon	96.8					0.319

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1998235, 1998236, 1998241, 1998242
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1998285, 1998286
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1998285, 1998286
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1998235, 1998236, 1998241, 1998242
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1998235, 1998236, 1998241, 1998242
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1998237, 1998238, 1998243, 1998244
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1998237, 1998238, 1998243, 1998244
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1998237, 1998238, 1998243, 1998244
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1998237, 1998238, 1998243, 1998244
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1998239, 1998240, 1998245, 1998246
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1998281, 1998282, 1998283, 1998284
SM 2120 B / E31780	True Color measured at 450 nm	1998235, 1998236, 1998241, 1998242
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1998235, 1998236, 1998241, 1998242
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1998235, 1998236, 1998241, 1998242
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	1998235, 1998236, 1998241, 1998242
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1998235, 1998236, 1998241, 1998242
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1998237, 1998238, 1998243, 1998244

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	06/06/2018			06/06/2018 17:13	William L. Brown IV	1998235, 1998236, 1998241, 1998242
EPA 200.7 Rev. 4.4	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/09/2018 00:03	Betina Topolski	1998285
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/09/2018 00:10	Betina Topolski	1998286
EPA 200.8 Rev. 5.4	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/11/2018 19:59	Nadine Brooks	1998285
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/11/2018 20:09	Nadine Brooks	1998286
	06/06/2018	06/14/2018 14:00	Elliott D. Healy	06/18/2018 19:31	Robert K Palmer	1998285
	06/06/2018	06/14/2018 14:00	Elliott D. Healy	06/18/2018 19:37	Robert K Palmer	1998286
	06/06/2018	06/21/2018 17:05	Elliott D. Healy	06/25/2018 15:53	Robert K Palmer	1998285
	06/06/2018	06/21/2018 17:05	Elliott D. Healy	06/25/2018 16:09	Robert K Palmer	1998286
EPA 300.0 Rev. 2.1	06/06/2018			06/14/2018 05:56	Lipi Saha	1998236
	06/06/2018			06/14/2018 08:20	Lipi Saha	1998235
	06/06/2018			06/14/2018 08:32	Lipi Saha	1998241
	06/06/2018			06/14/2018 08:44	Lipi Saha	1998242
EPA 350.1 Rev. 2.0	06/06/2018			06/15/2018 13:34	Adrian Shelby	1998237
	06/06/2018			06/15/2018 13:39	Adrian Shelby	1998244
	06/06/2018			06/15/2018 14:55	Adrian Shelby	1998238
	06/06/2018			06/19/2018 10:17	Ping Hua	1998243
EPA 351.2 Rev. 2.0	06/06/2018	06/19/2018 11:10	Adrian Shelby	06/20/2018 16:03	Joseph Suarez	1998237
	06/06/2018	06/19/2018 11:10	Adrian Shelby	06/20/2018 16:04	Joseph Suarez	1998238
	06/06/2018	06/19/2018 11:10	Adrian Shelby	06/20/2018 16:09	Joseph Suarez	1998243
	06/06/2018	06/19/2018 11:10	Adrian Shelby	06/20/2018 16:10	Joseph Suarez	1998244
EPA 353.2 Rev. 2.0	06/06/2018			06/11/2018 13:09	Lauren Bottorf	1998237
	06/06/2018			06/11/2018 13:22	Lauren Bottorf	1998238
	06/06/2018			06/11/2018 13:23	Lauren Bottorf	1998243
	06/06/2018			06/11/2018 13:25	Lauren Bottorf	1998244
EPA 365.1 Rev. 2.0	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 12:20	Beverly Y. Sanders	1998238
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 12:33	Beverly Y. Sanders	1998237
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 12:34	Beverly Y. Sanders	1998243
	06/06/2018	06/14/2018 12:39	Sima Feizi	06/18/2018 10:26	Beverly Y. Sanders	1998244
EPA 365.1 Rev. 2.0 dissolved	06/06/2018			06/06/2018 18:21	Megan Treadwell	1998239
	06/06/2018			06/06/2018 18:22	Megan Treadwell	1998240, 1998245
	06/06/2018			06/06/2018 18:23	Megan Treadwell	1998246
EPA 8321B	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/10/2018 07:19	Juyoung Kim	1998281
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/10/2018 07:54	Juyoung Kim	1998282
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/12/2018 21:51	Juyoung Kim	1998281
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/12/2018 22:26	Juyoung Kim	1998282
	06/06/2018	06/07/2018 13:00	Hoor Shaik	06/08/2018 06:51	Mohammad Ghaffari	1998282
	06/06/2018	06/07/2018 13:00	Hoor Shaik	06/08/2018 07:10	Mohammad Ghaffari	1998283
	06/06/2018	06/07/2018 13:00	Hoor Shaik	06/08/2018 07:47	Mohammad Ghaffari	1998284
	06/06/2018	06/07/2018 16:00	Hoor Shaik	06/08/2018 05:18	Mohammad Ghaffari	1998281

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	06/06/2018	06/08/2018 12:00	Hoor Shaik	06/12/2018 01:05	Juyoung Kim	1998283
	06/06/2018	06/08/2018 12:00	Hoor Shaik	06/12/2018 01:40	Juyoung Kim	1998284
	06/06/2018	06/08/2018 12:00	Hoor Shaik	06/13/2018 05:21	Juyoung Kim	1998283
	06/06/2018	06/08/2018 12:00	Hoor Shaik	06/13/2018 05:56	Juyoung Kim	1998284
	06/06/2018	06/08/2018 12:00	Hoor Shaik	06/21/2018 20:34	Juyoung Kim	1998283
	06/06/2018	06/08/2018 12:00	Hoor Shaik	06/21/2018 21:09	Juyoung Kim	1998284
SM 2120 B	06/06/2018			06/06/2018 16:27	Julia Storbeck	1998236
	06/06/2018			06/06/2018 17:09	Julia Storbeck	1998241
	06/06/2018			06/06/2018 17:10	Julia Storbeck	1998242
	06/06/2018			06/06/2018 17:12	Julia Storbeck	1998235
SM 2320 B-97	06/06/2018			06/13/2018 21:53	Dale L. Simmons	1998235
	06/06/2018			06/13/2018 22:03	Dale L. Simmons	1998236
	06/06/2018			06/13/2018 22:14	Dale L. Simmons	1998241
	06/06/2018			06/13/2018 22:24	Dale L. Simmons	1998242
SM 2540 C-97	06/06/2018			06/07/2018 17:38	Yijie Li	1998235, 1998236, 1998241, 1998242
SM 2540 D-97	06/06/2018			06/07/2018 17:38	Yijie Li	1998235, 1998236, 1998241, 1998242
SM 4500 F-C-97	06/06/2018			06/13/2018 21:53	Dale L. Simmons	1998235
	06/06/2018			06/13/2018 22:03	Dale L. Simmons	1998236
	06/06/2018			06/13/2018 22:14	Dale L. Simmons	1998241
	06/06/2018			06/13/2018 22:24	Dale L. Simmons	1998242
SM 5310 B-00	06/06/2018			06/11/2018 15:04	Megan Treadwell	1998244
	06/06/2018			06/12/2018 12:15	Megan Treadwell	1998237
	06/06/2018			06/12/2018 12:29	Megan Treadwell	1998238
	06/06/2018			06/12/2018 12:48	Megan Treadwell	1998243