

Chemical Analysis Report

NW-DIST-2019-09-19-01

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

Event Description: **ESC/BW BAY RUN**
Request ID: **RQ-2019-09-16-42**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 07-OCT-2019 11:10



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: 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 by the Florida Department of Health Environmental Laboratory Certification Program 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: Sanders Beach off I Street Dock

Collection Date/Time: 09/18/2019 10:30

Field ID: G4NW0492

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2121103	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P371101	
		2,4-D	0.0020	U	ug/L	P370935	MS
		AMPA**	1.0	U	ug/L	P371101	
		Sucralose**	0.11		ug/L	P371101	
		Acetaminophen**	0.0080	U	ug/L	P370935	
		Acetamiprid**	0.0020	U	ug/L	P370935	
		Endothall**	0.25	U	ug/L	P371101	
		Glufosinate**	1.0	U	ug/L	P371101	
		Glyphosate**	1.0	U	ug/L	P371101	
		Afidopyropen**	0.0020	UJ	ug/L	P370935	
		Bentazon	8.0E-04	U	ug/L	P370935	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370935	
		Carbamazepine**	8.0E-04	U	ug/L	P370935	
		Clothianidin**	0.0020	U	ug/L	P370935	
		Dinotefuran**	0.0020	U	ug/L	P370935	
		Diuron	0.0020	U	ug/L	P370935	
		Fenuron	0.016	U	ug/L	P370935	
		Fluridone**	8.0E-04	U	ug/L	P370935	
		Imazapyr**	0.0040	U	ug/L	P370935	
		Hydrocodone**	0.0020	U	ug/L	P370935	
		Ibuprofen**	0.020	U	ug/L	P370935	
		Imidacloprid	0.0020	U	ug/L	P370935	MS
		Linuron	0.0040	U	ug/L	P370935	
		Mandestrobin**	0.0020	UJ	ug/L	P370935	
		MCPP	0.0020	U	ug/L	P370935	MS
		Naproxen**	0.0080	U	ug/L	P370935	
		Primidone**	0.0040	U	ug/L	P370935	
		Pyraclostrobin**	0.0020	U	ug/L	P370935	
		Thiamethoxam**	0.0020	U	ug/L	P370935	
		Tolfenpyrad**	0.0020	U	ug/L	P370935	
		Triclopyr**	0.0040	U	ug/L	P370935	

Ref. Method and Comment:

EPA 8321B: MDL for some parameters elevated due to matrix interference.

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Sample Location: BAYOU CHICO

Collection Date/Time: 09/18/2019 10:55

Field ID: G4NW0483

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2121104	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P371101	
		2,4-D	0.0020	U	ug/L	P370935	MS
		AMPA**	1.0	U	ug/L	P371101	
		Sucralose**	0.43		ug/L	P371101	
		Acetaminophen**	0.0080	U	ug/L	P370935	
		Acetamiprid**	0.0020	U	ug/L	P370935	
		Endothall**	0.25	U	ug/L	P371101	
		Glufosinate**	1.0	U	ug/L	P371101	
		Glyphosate**	1.0	U	ug/L	P371101	
		Afidopyropen**	0.0020	UJ	ug/L	P370935	
		Bentazon	8.0E-04	U	ug/L	P370935	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370935	
		Carbamazepine**	0.0024	I	ug/L	P370935	
		Clothianidin**	0.0020	U	ug/L	P370935	
		Dinotefuran**	0.0020	U	ug/L	P370935	
		Diuron	0.0021	I	ug/L	P370935	
		Fenuron	0.016	U	ug/L	P370935	
		Fluridone**	8.0E-04	U	ug/L	P370935	
		Imazapyr**	0.0040	U	ug/L	P370935	
		Hydrocodone**	0.0020	U	ug/L	P370935	
		Ibuprofen**	0.020	U	ug/L	P370935	
		Imidacloprid	0.0057	I	ug/L	P370935	MS
		Linuron	0.0040	U	ug/L	P370935	
		Mandestrobin**	0.0020	UJ	ug/L	P370935	
		MCPP	0.0020	U	ug/L	P370935	MS
		Naproxen**	0.0080	U	ug/L	P370935	
		Primidone**	0.0040	U	ug/L	P370935	
		Pyraclostrobin**	0.0020	U	ug/L	P370935	
		Thiamethoxam**	0.0020	U	ug/L	P370935	
		Tolfenpyrad**	0.0020	U	ug/L	P370935	
		Triclopyr**	0.0040	U	ug/L	P370935	

Ref. Method and Comment:

EPA 8321B: MDL for some parameters elevated due to matrix interference.

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Sample Location: JUDGES BAYOU MOUTH

Collection Date/Time: 09/18/2019 11:10

Field ID: G4NW0441

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2121084	EPA 180.1 Rev. 2.0	Turbidity	3.8	A	NTU	P371017	
	EPA 300.0	Bromide	23		mg Br/L	P371116	
	SM 2320 B-97	Total Alkalinity	57		mg CaCO3/L	P371515	
	SM 2540 D-97	TSS	4	IA	mg/L	P371275	
	SM 4500 F-C-97	Fluoride	0.39		mg F/L	P371519	
2121087	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P371267	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P371619	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P371219	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P371163	
	SM 5310 B-00	Organic Carbon	4.6		mg C/L	P371200	
2121090	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P371008	

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: JUDGES BAYOU CONFLUENCE

Collection Date/Time: 09/18/2019 11:20

Field ID: G4NW0442

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2121085	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P371017	
	EPA 300.0	Bromide	15		mg Br/L	P371116	
	SM 2320 B-97	Total Alkalinity	42		mg CaCO3/L	P371515	
	SM 2540 D-97	TSS	3	U	mg/L	P371275	
	SM 4500 F-C-97	Fluoride	0.28		mg F/L	P371519	
2121088	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P371596	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39	I	mg N/L	P371619	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P371219	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P371163	
	SM 5310 B-00	Organic Carbon	4.8		mg C/L	P371180	
2121091	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P371008	

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: TROUT BAYOU

Collection Date/Time: 09/18/2019 11:50

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2121086	EPA 180.1 Rev. 2.0	Turbidity	4.4		NTU	P371018	
	EPA 300.0	Bromide	42		mg Br/L	P371116	
	SM 2320 B-97	Total Alkalinity	87		mg CaCO3/L	P371515	
	SM 2540 D-97	TSS	5	I	mg/L	P371275	
	SM 4500 F-C-97	Fluoride	0.73		mg F/L	P371519	
2121089	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P371596	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39	I	mg N/L	P371619	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P371219	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P371163	
	SM 5310 B-00	Organic Carbon	3.8		mg C/L	P371200	
2121092	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P371008	

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: P371017

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P371018

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0
Batch ID: P371116

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371267

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371596

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371619

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371219

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371163

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371008

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P370935

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	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
Mandestrobin	0.0020	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
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P371101

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2320 B-97
Batch ID: P371515

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

Reference Method: SM 2540 D-97
Batch ID: P371275

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P371519

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P371180

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

Reference Method: SM 5310 B-00
Batch ID: P371200

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0

Batch ID: P371116

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P371267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P371596

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P371619

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	92.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P371219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P371163

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P371008

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

Reference Method: EPA 8321B

Batch ID: P370935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	151		P	40 - 160
Acetaminophen	86.2		P	30 - 160
Acetamiprid	107		P	40 - 160
Afidopyropen	105		P	40 - 160
Bentazon	121		P	30 - 160
Benzovindiflupyr	97.5		P	40 - 160
Carbamazepine	108		P	40 - 160
Clothianidin	95.3		P	40 - 160
Dinotefuran	97.8		P	40 - 160
Diuron	105		P	40 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P370935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	105		P	40 - 160
Fluridone	99.2		P	40 - 160
Hydrocodone	93.1		P	40 - 160
Ibuprofen	100		P	30 - 160
Imazapyr	99.4		P	40 - 160
Imidacloprid	108		P	40 - 160
Linuron	84.2		P	40 - 160
Mandestrobin	96.7		P	40 - 160
MCPP	159		P	40 - 160
Naproxen	83.0		P	40 - 160
Primidone	94.3		P	40 - 160
Pyraclostrobin	90.5		P	30 - 160
Thiamethoxam	92.7		P	40 - 160
Tolfenpyrad	69.5		P	40 - 160
Triclopyr	120		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P371101

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	126		P	40 - 150
AMPA	89.5		P	40 - 150
Endothall	83.5		P	40 - 150
Glufosinate	88.1		P	40 - 150
Glyphosate	77.0		P	40 - 140
Sucralose	109		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P371515

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P371519

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P371180

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P371200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0
Batch ID: P371116

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120060	Bromide	95.7	96.1	P/P	90 - 110
2120064	Bromide	95.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120738	Ammonia-N	96.7	98.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371596

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121089	Ammonia-N	97.7	96.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371619

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121087	Kjeldahl Nitrogen	90.9	94.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120745	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371163

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120755	Total-P	98.6	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371008

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121092	O-Phosphate-P	96.0	96.7	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P370935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121150	2,4-D	169	163	F/F	40 - 160
2121150	Acetaminophen	74.3	74.7	P/P	30 - 160
2121150	Acetamiprid	127	118	P/P	40 - 160
2121150	Afidopyropen	117	108	P/P	40 - 160
2121150	Bentazon	69.4	64.1	P/P	30 - 160
2121150	Benzovindiflupyr	100	101	P/P	40 - 160
2121150	Carbamazepine	95.0	90.8	P/P	40 - 160
2121150	Clothianidin	88.4	107	P/P	40 - 160
2121150	Dinotefuran	119	111	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P370935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121150	Diuron	90.4	87.8	P/P	40 - 160
2121150	Fenuron	94.8	91.2	P/P	40 - 160
2121150	Fluridone	93.2	93.1	P/P	40 - 160
2121150	Hydrocodone	108	102	P/P	40 - 160
2121150	Ibuprofen	95.7	93.5	P/P	30 - 160
2121150	Imazapyr	119	108	P/P	40 - 160
2121150	Imidacloprid	187	190	F/F	40 - 160
2121150	Linuron	73.9	75.6	P/P	40 - 160
2121150	Mandestrobin	95.0	92.4	P/P	40 - 160
2121150	MCPP	169	171	F/F	40 - 160
2121150	Naproxen	102	105	P/P	40 - 160
2121150	Primidone	99.6	92.5	P/P	40 - 160
2121150	Pyraclostrobin	97.9	97.1	P/P	30 - 160
2121150	Thiamethoxam	130	140	P/P	40 - 160
2121150	Tolfenpyrad	71.9	71.4	P/P	40 - 160
2121150	Triclopyr	143	140	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P371101

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121020	Acesulfame K	134	134	P/P	40 - 150
2121020	AMPA	46.3	49.7	P/P	40 - 150
2121020	Endothall	81.1	82.8	P/P	40 - 150
2121020	Glufosinate	81.2	80.4	P/P	40 - 150
2121020	Glyphosate	62.9	68.9	P/P	40 - 140
2121020	Sucralose	111	112	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P371519

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119124	Fluoride	95.1	95.1	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P371180

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121088	Organic Carbon	95.0	94.4	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P371200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121392	Organic Carbon	97.0	99.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P371017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121084	Turbidity	2.09	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P371018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121120	Turbidity	10.1	Sample	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P371116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120060	Bromide	0.450	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120738	Ammonia-N	1.37	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371596

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121089	Ammonia-N	1.28	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371619

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121087	Kjeldahl Nitrogen	2.88	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120745	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120755	Total-P	0.851	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121092	O-Phosphate-P	0.727	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P370935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121150	2,4-D	3.53	Spike	P	0 - 30
2121150	Acetaminophen	0.573	Spike	P	0 - 30
2121150	Acetamiprid	7.35	Spike	P	0 - 30
2121150	Afidopyrophen	7.71	Spike	P	0 - 30
2121150	Bentazon	7.96	Spike	P	0 - 30
2121150	Benzovindiflupyr	0.744	Spike	P	0 - 30
2121150	Carbamazepine	4.47	Spike	P	0 - 30
2121150	Clothianidin	18.7	Spike	P	0 - 30
2121150	Dinotefuran	6.97	Spike	P	0 - 30
2121150	Diuron	2.89	Spike	P	0 - 30
2121150	Fenuron	3.91	Spike	P	0 - 30
2121150	Fluridone	0.139	Spike	P	0 - 30
2121150	Hydrocodone	5.86	Spike	P	0 - 30
2121150	Ibuprofen	2.30	Spike	P	0 - 30
2121150	Imazapyr	9.87	Spike	P	0 - 30
2121150	Imidacloprid	1.79	Spike	P	0 - 30
2121150	Linuron	2.30	Spike	P	0 - 30
2121150	Mandestrobin	2.86	Spike	P	0 - 30
2121150	MCP	1.53	Spike	P	0 - 30
2121150	Naproxen	3.70	Spike	P	0 - 30
2121150	Primidone	7.34	Spike	P	0 - 30
2121150	Pyraclostrobin	0.820	Spike	P	0 - 30
2121150	Thiamethoxam	7.67	Spike	P	0 - 30
2121150	Tolfenpyrad	0.686	Spike	P	0 - 30
2121150	Triclopyr	1.80	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P371101

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121020	Acesulfame K	0.412	Spike	P	0 - 30
2121020	AMPA	4.62	Spike	P	0 - 30
2121020	Endothall	2.08	Spike	P	0 - 30
2121020	Glufosinate	1.02	Spike	P	0 - 30
2121020	Glyphosate	7.20	Spike	P	0 - 30
2121020	Sucralose	0.217	Spike	P	0 - 30

Reference Method: SM 2320 B-97
Batch ID: P371515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121389	Total Alkalinity	0.179	Sample	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P371519

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119124	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P371180

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121088	Organic Carbon	0.464	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P371200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121392	Organic Carbon	2.02	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2121103
Field Sample ID: G4NW0492

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	155	P	30 - 160
EPA 8321B	Acetaminophen-d4	73.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	91.6	P	30 - 160
EPA 8321B	Endothall-d6	87.2	P	30 - 160
EPA 8321B	Endothall-d6	87.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	41.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	41.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.1	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	144	P	30 - 160
EPA 8321B	Sucralose-d6	144	P	30 - 160

Lab Sample ID: 2121104
Field Sample ID: G4NW0483

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	147	P	30 - 160
EPA 8321B	Acetaminophen-d4	75.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.2	P	30 - 160
EPA 8321B	Diuron-d6	88.2	P	30 - 160
EPA 8321B	Endothall-d6	89.1	P	30 - 160
EPA 8321B	Endothall-d6	89.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	57.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	57.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.6	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	131	P	30 - 160
EPA 8321B	Sucralose-d6	131	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A94346

Included Lab Sample IDs: 2121090, 2121091, 2121092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	98.9	P/P	90 - 110
O-Phosphate-P	99.2	99.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A94348

Included Lab Sample IDs: 2121084, 2121085, 2121086

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

Reference Method: EPA 300.0

Run ID: A94401

Included Lab Sample IDs: 2121084, 2121085, 2121086

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

Reference Method: EPA 8321B

Run ID: A94410

Included Lab Sample IDs: 2121103, 2121104

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	90.8	104	P/P	50 - 150
Acetaminophen	96.5	102	P/P	60 - 160
Acetamiprid	116	113	P/P	50 - 150
Afidopyropen	113	87.8	P/P	50 - 150
Bentazon	114	110	P/P	50 - 160
Benzovindiflupyr	106	109	P/P	50 - 150
Carbamazepine	107	105	P/P	60 - 150
Clothianidin	101	106	P/P	60 - 150
Dinotefuran	105	104	P/P	50 - 150
Diuron	113	112	P/P	60 - 150
Fenuron	112	106	P/P	60 - 150
Fluridone	111	112	P/P	60 - 160
Hydrocodone	103	108	P/P	60 - 150
Ibuprofen	74.3	83.1	P/P	50 - 160
Imazapyr	101	102	P/P	50 - 150
Imidacloprid	102	102	P/P	60 - 150
Linuron	108	104	P/P	60 - 150
Mandestrobin	113	108	P/P	50 - 150
MCP	98.1	96.6	P/P	50 - 150
Naproxen	79.8	99.7	P/P	50 - 160
Primidone	89.0	97.3	P/P	60 - 150
Pyraclostrobin	115	109	P/P	60 - 150
Thiamethoxam	101	89.4	P/P	50 - 150
Tolfenpyrad	113	114	P/P	60 - 150
Triclopyr	87.9	96.4	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A94418
Included Lab Sample IDs: 2121088

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	98.0	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A94437
Included Lab Sample IDs: 2121087, 2121089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.1	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A94451
Included Lab Sample IDs: 2121087, 2121088, 2121089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A94456
Included Lab Sample IDs: 2121087, 2121088, 2121089

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

Reference Method: EPA 8321B
Run ID: A94467
Included Lab Sample IDs: 2121103, 2121104

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	65.4	97.1	P/P	60 - 160
Acesulfame K	97.1	121	P/P	60 - 160
Endothall	100	93.2	P/P	60 - 160
Endothall	93.2	93.6	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A94474
Included Lab Sample IDs: 2121087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.2	96.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A94522
Included Lab Sample IDs: 2121103, 2121104

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.4	101	P/P	60 - 160
Glufosinate	86.5	111	P/P	60 - 160
Glyphosate	102	104	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A94575

Included Lab Sample IDs: 2121084, 2121085, 2121086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	102	P/P	90 - 110
Total Alkalinity	102	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A94575

Included Lab Sample IDs: 2121084, 2121085, 2121086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	P/P	90 - 110
Fluoride	99.5	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94586

Included Lab Sample IDs: 2121103, 2121104

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	105	99.8	P/P	60 - 160
Sucralose	99.8	103	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A94610

Included Lab Sample IDs: 2121088, 2121089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.0	97.5	P/P	90 - 110
Ammonia-N	99.1	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A94665

Included Lab Sample IDs: 2121087, 2121088, 2121089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.2	93.8	P/P	90 - 110
Kjeldahl Nitrogen	93.8	97.9	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					2.09	
	Turbidity					10.1	
EPA 300.0	Bromide	98.2	95.7	96.1	95.2		0.450
EPA 350.1 Rev. 2.0	Ammonia-N	94.3	96.7	98.1			1.37
	Ammonia-N	102	97.7	96.3			1.28
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	92.2	90.9	94.2			2.88
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	98.7	98.6	99.5			0.851
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	94.9	96.0	96.7			0.727
EPA 8321B	2,4-D	151	169	163			3.53
	Acesulfame K	126	134	134			0.412
	Acetaminophen	86.2	74.3	74.7			0.573
	Acetamiprid	107	127	118			7.35
	Afidopyropen	105	117	108			7.71
	AMPA	89.5	46.3	49.7			4.62
	Bentazon	121	69.4	64.1			7.96
	Benzovindiflupyr	97.5	100	101			0.744
	Carbamazepine	108	95.0	90.8			4.47
	Clothianidin	95.3	88.4	107			18.7
	Dinotefuran	97.8	119	111			6.97
	Diuron	105	90.4	87.8			2.89
	Endothall	83.5	81.1	82.8			2.08
	Fenuron	105	94.8	91.2			3.91
	Fluridone	99.2	93.2	93.1			0.139
	Glufosinate	88.1	81.2	80.4			1.02
	Glyphosate	77.0	62.9	68.9			7.20
	Hydrocodone	93.1	108	102			5.86
	Ibuprofen	100	95.7	93.5			2.30
	Imazapyr	99.4	119	108			9.87
	Imidacloprid	108	187	190			1.79
	Linuron	84.2	73.9	75.6			2.30
	Mandestrobin	96.7	95.0	92.4			2.86
	MCPP	159	169	171			1.53
	Naproxen	83.0	102	105			3.70
	Primidone	94.3	99.6	92.5			7.34
	Pyraclostrobin	90.5	97.9	97.1			0.820
	Sucralose	109	111	112			0.217
	Thiamethoxam	92.7	130	140			7.67
	Tolfenpyrad	69.5	71.9	71.4			0.686
	Triclopyr	120	143	140			1.80
SM 2320 B-97	Total Alkalinity	101				0.179	
SM 4500 F-C-97	Fluoride	96.1	95.1	95.1			0.0
SM 5310 B-00	Organic Carbon	98.2	95.0	94.4			0.464
	Organic Carbon	97.9	97.0	99.3			2.02

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2121084, 2121085, 2121086
EPA 300.0 / E31780	Bromide in aqueous matrices	2121084, 2121085, 2121086
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2121087, 2121088, 2121089

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2121087, 2121088, 2121089
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2121087, 2121088, 2121089
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2121087, 2121088, 2121089
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2121090, 2121091, 2121092
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2121103, 2121104
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2121103, 2121104
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2121084, 2121085, 2121086
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2121084, 2121085, 2121086
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2121084, 2121085, 2121086
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2121087, 2121088, 2121089

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/19/2019			09/19/2019 15:53	Rosalyn Ballman	2121084, 2121085, 2121086
EPA 300.0	09/19/2019			09/21/2019 00:30	Jhamieka S. Greenwood	2121084
	09/19/2019			09/21/2019 01:21	Jhamieka S. Greenwood	2121085
	09/19/2019			09/21/2019 01:38	Jhamieka S. Greenwood	2121086
EPA 350.1 Rev. 2.0	09/19/2019			09/24/2019 14:45	Ping Hua	2121087
	09/19/2019			09/27/2019 14:14	Ping Hua	2121089
	09/19/2019			09/27/2019 14:26	Ping Hua	2121088
EPA 351.2 Rev. 2.0	09/19/2019	10/01/2019 11:12	Sima Feizi	10/02/2019 14:02	Julia Storbeck	2121087
	09/19/2019	10/01/2019 11:12	Sima Feizi	10/02/2019 14:21	Julia Storbeck	2121088
	09/19/2019	10/01/2019 11:12	Sima Feizi	10/02/2019 14:22	Julia Storbeck	2121089
EPA 353.2 Rev. 2.0	09/19/2019			09/24/2019 10:28	Beverly Y. Sanders	2121087
	09/19/2019			09/24/2019 10:29	Beverly Y. Sanders	2121088
	09/19/2019			09/24/2019 10:30	Beverly Y. Sanders	2121089
EPA 365.1 Rev. 2.0	09/19/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 12:44	Lipi Saha	2121087
	09/19/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 12:52	Lipi Saha	2121088
	09/19/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 12:53	Lipi Saha	2121089
EPA 365.1 Rev. 2.0 dissolved	09/19/2019			09/19/2019 15:56	Jhamieka S. Greenwood	2121092
	09/19/2019			09/19/2019 16:26	Jhamieka S. Greenwood	2121090
	09/19/2019			09/19/2019 16:27	Jhamieka S. Greenwood	2121091
EPA 8321B	09/19/2019	09/20/2019 12:00	Hoor Shaik	09/20/2019 18:13	Juyoung Kim	2121103
	09/19/2019	09/20/2019 12:00	Hoor Shaik	09/20/2019 18:48	Juyoung Kim	2121104
	09/19/2019	09/23/2019 10:00	Rebecca Ware	09/23/2019 14:15	Rebecca Ware	2121103
	09/19/2019	09/23/2019 10:00	Rebecca Ware	09/23/2019 14:26	Rebecca Ware	2121104
	09/19/2019	09/23/2019 10:00	Rebecca Ware	09/24/2019 18:15	Rebecca Ware	2121103
	09/19/2019	09/23/2019 10:00	Rebecca Ware	09/24/2019 18:42	Rebecca Ware	2121104
	09/19/2019	09/23/2019 10:00	Rebecca Ware	09/27/2019 18:15	Rebecca Ware	2121103
	09/19/2019	09/23/2019 10:00	Rebecca Ware	09/27/2019 18:38	Rebecca Ware	2121104
SM 2320 B-97	09/19/2019			09/27/2019 02:45	Dale L. Simmons	2121085
	09/19/2019			09/27/2019 03:24	Dale L. Simmons	2121084
	09/19/2019			09/27/2019 04:34	Dale L. Simmons	2121086
SM 2540 D-97	09/19/2019			09/20/2019 17:00	Blanca Fach	2121084, 2121085, 2121086
SM 4500 F-C-97	09/19/2019			09/27/2019 00:20	Dale L. Simmons	2121085
	09/19/2019			09/27/2019 01:33	Dale L. Simmons	2121084
	09/19/2019			09/27/2019 01:41	Dale L. Simmons	2121086
SM 5310 B-00	09/19/2019			09/23/2019 06:17	Madeline Funaro	2121088
	09/19/2019			09/24/2019 07:42	Madeline Funaro	2121087
	09/19/2019			09/24/2019 07:54	Madeline Funaro	2121089