

Chemical Analysis Report

NE-DIST-2020-10-20-01

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

Event Description: **Gainesville**
Request ID: **RQ-2020-10-19-21**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 10-NOV-2020 10:35

A handwritten signature in black ink, appearing to read "Liang Lin", is shown 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: 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: Calf Creek at SE 27th St.

Collection Date/Time: 10/19/2020 09:55

Field ID: G1NE0931

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203456	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P388977	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P389373	
		Sulfate	7.4		mg SO4/L	P389376	
	SM 2120 B-2011	Color (true)	100	A	PCU	P388985	
	SM 2320 B-2011	Total Alkalinity	106		mg CaCO3/L	P389229	
	SM 2540 C-2011	TDS	185	A	mg/L	P389382	
	SM 2540 D-2011	TSS	2	UA	mg/L	P389310	
	SM 4500 F-C-2011	Fluoride	0.16		mg F/L	P389118	
2203457	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P389208	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P389188	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P389017	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P389251	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P389069	
2203458	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.085		mg P/L	P388988	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Lake Alice Center

Collection Date/Time: 10/19/2020 11:40

Field ID: 20020052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203459	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P388977	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P389373	
		Sulfate	26		mg SO4/L	P389376	
	SM 2120 B-2011	Color (true)	38		PCU	P388985	
	SM 2320 B-2011	Total Alkalinity	78		mg CaCO3/L	P389229	
	SM 2540 C-2011	TDS	148		mg/L	P389382	
	SM 2540 D-2011	TSS	2	I	mg/L	P389310	
2203460	SM 4500 F-C-2011	Fluoride	0.30		mg F/L	P389118	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.039		mg N/L	P389203	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P389188	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P389017	
	EPA 365.1 Rev. 2.0	Total-P	0.52		mg P/L	P389251	
2203461	SM 5310 B-2011	Organic Carbon	6.4		mg C/L	P389069	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.38		mg P/L	P388988	
2203468	EPA 8276	Chlordane	6.1	U	ng/L	P389028	
		Toxaphene	36	U	ng/L	P389028	
2203469	EPA 8321B	2,4-D	0.26		ug/L	P388895	
		Acesulfame K**	0.10	U	ug/L	P389065	MS
		AMPA**	0.27	I	ug/L	P389065	
		Sucralose**	0.72		ug/L	P389065	
		Acetaminophen**	0.0080	U	ug/L	P388895	
		Acetamiprid**	0.0020	U	ug/L	P388895	
		Endothal**	0.25	U	ug/L	P389065	
		Glufosinate**	0.10	U	ug/L	P389065	
		Glyphosate**	0.10	U	ug/L	P389065	
		Afidopyropen**	0.0020	U	ug/L	P388895	
		Bentazon	8.0E-04	U	ug/L	P388895	MS
		Benzovindiflupyr**	0.0020	U	ug/L	P388895	
		Carbamazepine**	8.0E-04	U	ug/L	P388895	
		Clothianidin**	0.0020	U	ug/L	P388895	
		Dinotefuran**	0.0020	U	ug/L	P388895	
		Diuron	0.0036	I	ug/L	P388895	MS, RPD
		Fenuron	0.016	U	ug/L	P388895	
		Fluridone**	0.0026	I	ug/L	P388895	
		Imazapyr**	0.15		ug/L	P388895	MS
		Hydrocodone**	0.0020	U	ug/L	P388895	
		Ibuprofen**	0.020	U	ug/L	P388895	
		Imidacloprid	0.0034	I	ug/L	P388895	
		Linuron	0.0040	U	ug/L	P388895	
		Mandestrobin**	0.0020	U	ug/L	P388895	
		MCP	0.0020	U	ug/L	P388895	
		Naproxen**	0.0080	U	ug/L	P388895	MS
		Primidone**	0.0040	U	ug/L	P388895	RPD

Field ID: 20020052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203469	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P388895	
		Thiamethoxam**	0.0020	U	ug/L	P388895	
		Tolfenpyrad**	0.0020	U	ug/L	P388895	
		Triclopyr**	0.0040	U	ug/L	P388895	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Calf Creek at SE 27th St.

Collection Date/Time: 10/19/2020 10:00

Field ID: FB101920

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203462	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P388977	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P389373	
		Sulfate	0.20	U	mg SO4/L	P389376	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P388985	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P389229	
	SM 2540 C-2011	TDS	15	U	mg/L	P389379	
	SM 2540 D-2011	TSS	2	U	mg/L	P389307	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P389118	
2203463	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P389203	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P389188	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P389017	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P389251	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P389069	
2203464	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P388988	

Ref. Method and Comment:

SM 2540 D-2011: 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: P388977

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389373

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389376

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389203

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389208

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389188

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389017

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389251

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388988

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P389028

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P388895

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: P389065

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 2120 B-2011
Batch ID: P388985

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P389229

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

Reference Method: SM 2540 C-2011
Batch ID: P389379

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P389382

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389307

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389310

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389118

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389069

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389373

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389376

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389203

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389208

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: P389188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389017

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389251

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388988

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

Reference Method: EPA 8276
Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	97.1	99.4	P/P	47 - 119
Toxaphene	74.7	81.2	P/P	41 - 112

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P388895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	45.5		P	30 - 160
Acetaminophen	53.8		P	30 - 160
Acetamiprid	61.5		P	30 - 160
Afidopyropen	50.6		P	30 - 160
Bentazon	48.3		P	30 - 160
Benzovindiflupyr	65.0		P	30 - 160
Carbamazepine	63.9		P	30 - 160
Clothianidin	101		P	30 - 160
Dinotefuran	84.8		P	30 - 160
Diuron	70.2		P	30 - 160
Fenuron	100		P	30 - 160
Fluridone	83.0		P	30 - 160
Hydrocodone	79.0		P	30 - 160
Ibuprofen	48.4		P	30 - 160
Imazapyr	52.0		P	30 - 160
Imidacloprid	77.2		P	30 - 160
Linuron	61.1		P	30 - 160
Mandestrobin	78.8		P	30 - 160
MCPP	58.1		P	30 - 160
Naproxen	45.5		P	30 - 160
Primidone	90.5		P	30 - 160
Pyraclostrobin	58.8		P	30 - 160
Thiamethoxam	85.6		P	30 - 160
Tolfenpyrad	38.6		P	30 - 160
Triclopyr	50.2		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	81.7		P	40 - 150
AMPA	101		P	40 - 150
Endothall	83.7		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	95.2		P	40 - 140
Sucralose	116		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P388985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P389229

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P389118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389069

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203363	Chloride	106		P	90 - 110
2203407	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389376

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203363	Sulfate	104		P	90 - 110
2203407	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389203

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203625	Ammonia-N	99.1	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389208

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203335	Ammonia-N	106	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203604	Kjeldahl Nitrogen	102	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389017

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203352	NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389251

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203408	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203388	O-Phosphate-P	98.9	98.7	P/P	90 - 110

Reference Method: EPA 8276
Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203933	Chlordane	110	112	P/P	34 - 129
2203933	Toxaphene	108	115	P/P	16 - 148

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P388895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202818	2,4-D	40.9	42.4	P/P	30 - 160
2202818	Acetaminophen	85.6	100	P/P	30 - 160
2202818	Acetamiprid	60.5	51.3	P/P	30 - 160
2202818	Afidopyropen	45.1	34.0	P/P	30 - 160
2202818	Bentazon	20.2	19.8	F/F	30 - 160
2202818	Benzovindiflupyr	57.5	49.0	P/P	30 - 160
2202818	Carbamazepine	49.3	39.3	P/P	30 - 160
2202818	Clothianidin	76.6	66.5	P/P	30 - 160
2202818	Dinotefuran	68.1	63.9	P/P	30 - 160
2202818	Diuron	30.1	20.7	P/F	30 - 160
2202818	Fenuron	61.7	70.3	P/P	30 - 160
2202818	Fluridone	66.7	51.6	P/P	30 - 160
2202818	Hydrocodone	56.5	57.6	P/P	30 - 160
2202818	Ibuprofen	36.6	35.8	P/P	30 - 160
2202818	Imazapyr	28.2	26.5	F/F	30 - 160
2202818	Imidacloprid	112	95.4	P/P	30 - 160
2202818	Linuron	53.7	54.4	P/P	30 - 160
2202818	Mandestrobin	64.4	58.6	P/P	30 - 160
2202818	MCP	63.1	58.3	P/P	30 - 160
2202818	Naproxen	32.2	29.6	P/F	30 - 160
2202818	Primidone	63.4	40.6	P/P	30 - 160
2202818	Pyraclostrobin	57.0	50.1	P/P	30 - 160
2202818	Thiamethoxam	83.0	69.4	P/P	30 - 160
2202818	Tolfenpyrad	35.7	32.5	P/P	30 - 160
2202818	Triclopyr	54.4	46.4	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203277	Acesulfame K	27.0	27.2	F/F	40 - 150
2203277	AMPA	98.9	96.6	P/P	40 - 150
2203277	Endothall	79.5	82.6	P/P	40 - 150
2203277	Glufosinate	91.9	89.7	P/P	40 - 150
2203277	Glyphosate	82.4	75.2	P/P	40 - 140
2203277	Sucralose	113	100	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P389118

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203350	Fluoride	103	105	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P389069

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203460	Organic Carbon	97.6	97.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203584	Turbidity	1.30	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203363	Chloride	0.487	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203363	Sulfate	0.720	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389203

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203625	Ammonia-N	0.540	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203335	Ammonia-N	0.800	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203604	Kjeldahl Nitrogen	1.76	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203352	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389251

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203408	Total-P	0.937	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203388	O-Phosphate-P	0.178	Spike	P	0 - 20

Reference Method: EPA 8276
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203933	Chlordane	1.91	Spike	P	0 - 30
2203933	Toxaphene	5.96	Spike	P	0 - 30
LFB	Chlordane	2.35	LCS	P	0 - 30
LFB	Toxaphene	8.43	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P388895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202818	2,4-D	2.97	Spike	P	0 - 30
2202818	Acetaminophen	15.7	Spike	P	0 - 30
2202818	Acetamiprid	16.4	Spike	P	0 - 30
2202818	Afidopyropen	28.0	Spike	P	0 - 30
2202818	Bentazon	0.898	Spike	P	0 - 30
2202818	Benzovindiflupyr	15.9	Spike	P	0 - 30
2202818	Carbamazepine	22.4	Spike	P	0 - 30
2202818	Clothianidin	14.1	Spike	P	0 - 30
2202818	Dinotefuran	6.44	Spike	P	0 - 30
2202818	Diuron	31.8	Spike	F	0 - 30
2202818	Fenuron	13.0	Spike	P	0 - 30
2202818	Fluridone	20.5	Spike	P	0 - 30
2202818	Hydrocodone	2.04	Spike	P	0 - 30
2202818	Ibuprofen	2.25	Spike	P	0 - 30
2202818	Imazapyr	3.05	Spike	P	0 - 30
2202818	Imidacloprid	15.4	Spike	P	0 - 30
2202818	Linuron	1.34	Spike	P	0 - 30
2202818	Mandestrobin	9.44	Spike	P	0 - 30
2202818	MCP	8.05	Spike	P	0 - 30
2202818	Naproxen	8.26	Spike	P	0 - 30
2202818	Primidone	43.7	Spike	F	0 - 30
2202818	Pyraclostrobin	12.9	Spike	P	0 - 30
2202818	Thiamethoxam	17.7	Spike	P	0 - 30
2202818	Tolfenpyrad	9.44	Spike	P	0 - 30
2202818	Triclopyr	15.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203277	Acesulfame K	0.737	Spike	P	0 - 30
2203277	AMPA	2.38	Spike	P	0 - 30
2203277	Endothall	3.88	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203277	Glufosinate	2.45	Spike	P	0 - 30
2203277	Glyphosate	9.13	Spike	P	0 - 30
2203277	Sucralose	12.1	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P388985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203456	Color (true)	0.194	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P389229

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204122	Total Alkalinity	1.10	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P389379

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202794	TDS	1.90	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P389382

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203456	TDS	1.08	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P389118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203350	Fluoride	2.01	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P389069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203460	Organic Carbon	0.116	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2203468
Field Sample ID: 20020052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	50.8	P	26 - 97.0
EPA 8276	PCNB	85.2	P	38 - 141

Lab Sample ID: 2203469
Field Sample ID: 20020052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	60.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	51.7	P	30 - 160
EPA 8321B	Diuron-d6	43.8	P	30 - 160
EPA 8321B	Endothall-d6	97.6	P	30 - 160
EPA 8321B	Endothall-d6	97.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	124	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	124	P	30 - 160
EPA 8321B	Ibuprofen-d3	54.4	P	30 - 160
EPA 8321B	Primidone-d5	66.1	P	30 - 160
EPA 8321B	Sucralose-d6	67.9	P	30 - 160
EPA 8321B	Sucralose-d6	67.9	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101640

Included Lab Sample IDs: 2203456, 2203459, 2203462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A101644

Included Lab Sample IDs: 2203456, 2203459, 2203462

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101645

Included Lab Sample IDs: 2203458, 2203461, 2203464

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101657

Included Lab Sample IDs: 2203457, 2203460, 2203463

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

Reference Method: EPA 8321B

Run ID: A101671

Included Lab Sample IDs: 2203469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	75.7	80.2	P/P	50 - 150
Acetaminophen	98.3	115	P/P	60 - 160
Acetamiprid	117	118	P/P	50 - 150
Afidopyropen	90.2	94.6	P/P	50 - 150
Bentazon	80.7	80.7	P/P	50 - 160
Benzovindiflupyr	99.9	92.9	P/P	50 - 150
Carbamazepine	109	99.5	P/P	60 - 150
Clothianidin	107	100	P/P	60 - 150
Dinotefuran	92.4	94.8	P/P	50 - 150
Diuron	101	100	P/P	60 - 160
Fenuron	106	110	P/P	60 - 150
Fluridone	97.3	101	P/P	60 - 160
Hydrocodone	98.8	100	P/P	60 - 150
Ibuprofen	79.9	80.9	P/P	50 - 160
Imazapyr	112	113	P/P	50 - 160
Imidacloprid	89.6	96.4	P/P	60 - 150
Linuron	62.6	67.6	P/P	60 - 150
Mandestrobin	101	109	P/P	50 - 150
MCPP	70.2	63.7	P/P	50 - 150
Naproxen	83.3	124	P/P	50 - 160
Primidone	82.2	102	P/P	60 - 150
Pyraclostrobin	97.0	90.9	P/P	60 - 150
Thiamethoxam	91.6	90.1	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A101671

Included Lab Sample IDs: 2203469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tolfenpyrad	76.5	89.6	P/P	60 - 150
Triclopyr	71.7	79.4	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A101673

Included Lab Sample IDs: 2203457, 2203460, 2203463

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	98.6	P/P	90 - 110
Organic Carbon	98.6	98.8	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A101694

Included Lab Sample IDs: 2203456, 2203459, 2203462

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

Reference Method: EPA 8321B

Run ID: A101706

Included Lab Sample IDs: 2203469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	86.9	75.4	P/P	50 - 160
Endothall	87.7	100	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A101728

Included Lab Sample IDs: 2203469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.4	98.0	P/P	50 - 160
Glufosinate	86.2	97.1	P/P	50 - 160
Glyphosate	85.6	93.9	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101736

Included Lab Sample IDs: 2203460, 2203463

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101740

Included Lab Sample IDs: 2203457

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A101749

Included Lab Sample IDs: 2203456, 2203459, 2203462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.5	99.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101768

Included Lab Sample IDs: 2203457, 2203460, 2203463

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

Reference Method: EPA 8321B

Run ID: A101788

Included Lab Sample IDs: 2203469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	104	122	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101793

Included Lab Sample IDs: 2203457, 2203460

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101798

Included Lab Sample IDs: 2203456, 2203459, 2203462

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101803

Included Lab Sample IDs: 2203463

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	95.2	96.2	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A101822

Included Lab Sample IDs: 2203468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.0		P	80 - 120
Toxaphene	105		P	80 - 120

* 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						1.30	
EPA 300.0 Rev. 2.1	Chloride	102		106	103		0.487	
	Sulfate	103		104	103		0.720	
EPA 350.1 Rev. 2.0	Ammonia-N	98.5		99.1	98.6			0.540
	Ammonia-N	102		106	105			0.800
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107		102	100			1.76
EPA 353.2 Rev. 2.0	NO2NO3-N	100		99.0	99.0			0.0
EPA 365.1 Rev. 2.0	Total-P	103		105	106			0.937
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.9		98.9	98.7			0.178
EPA 8276	Chlordane	97.1	99.4	110	112	2.35		1.91
	Toxaphene	74.7	81.2	108	115	8.43		5.96
EPA 8321B	2,4-D	45.5		40.9	42.4			2.97
	Acesulfame K	81.7		27.0	27.2			0.737
	Acetaminophen	53.8		85.6	100			15.7
	Acetamiprid	61.5		60.5	51.3			16.4
	Afidopyropen	50.6		45.1	34.0			28.0
	AMPA	101		98.9	96.6			2.38
	Bentazon	48.3		20.2	19.8			0.898
	Benzovindiflupyr	65.0		57.5	49.0			15.9
	Carbamazepine	63.9		49.3	39.3			22.4
	Clothianidin	101		76.6	66.5			14.1
	Dinotefuran	84.8		68.1	63.9			6.44
	Diuron	70.2		30.1	20.7			31.8
	Endothall	83.7		79.5	82.6			3.88
	Fenuron	100		61.7	70.3			13.0
	Fluridone	83.0		66.7	51.6			20.5
	Glufosinate	100		91.9	89.7			2.45
	Glyphosate	95.2		82.4	75.2			9.13
	Hydrocodone	79.0		56.5	57.6			2.04
	Ibuprofen	48.4		36.6	35.8			2.25
	Imazapyr	52.0		28.2	26.5			3.05
	Imidacloprid	77.2		112	95.4			15.4
	Linuron	61.1		53.7	54.4			1.34
	Mandestrobin	78.8		64.4	58.6			9.44
	MCPP	58.1		63.1	58.3			8.05
	Naproxen	45.5		32.2	29.6			8.26
	Primidone	90.5		63.4	40.6			43.7
	Pyraclostrobin	58.8		57.0	50.1			12.9
	Sucralose	116		113	100			12.1
	Thiamethoxam	85.6		83.0	69.4			17.7
	Tolfenpyrad	38.6		35.7	32.5			9.44
	Triclopyr	50.2		54.4	46.4			15.9
SM 2120 B-2011	Color (true)	101					0.194	
SM 2320 B-2011	Total Alkalinity	101					1.10	
SM 2540 C-2011	TDS						1.90	
	TDS						1.08	
SM 4500 F-C-2011	Fluoride	99.3		103	105			2.01
SM 5310 B-2011	Organic Carbon	99.3		97.6	97.7			0.116

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2203456, 2203459, 2203462

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2203456, 2203459, 2203462
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2203456, 2203459, 2203462
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2203457, 2203460, 2203463
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2203457, 2203460, 2203463
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2203457, 2203460, 2203463
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2203457, 2203460, 2203463
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2203458, 2203461, 2203464
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2203468
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2203469
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2203469
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2203456, 2203459, 2203462
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2203456, 2203459, 2203462
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2203456, 2203459, 2203462
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2203456, 2203459, 2203462
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2203456, 2203459, 2203462
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2203457, 2203460, 2203463

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	10/20/2020			10/20/2020 16:02	Yen Ta	2203456, 2203459, 2203462
EPA 300.0 Rev. 2.1	10/20/2020			10/28/2020 01:51	Lipi Saha	2203456
	10/20/2020			10/28/2020 02:04	Lipi Saha	2203459
	10/20/2020			10/28/2020 02:17	Lipi Saha	2203462
EPA 350.1 Rev. 2.0	10/20/2020			10/24/2020 17:51	Ping Hua	2203460
	10/20/2020			10/24/2020 18:02	Ping Hua	2203463
	10/20/2020			10/25/2020 10:41	Ping Hua	2203457
EPA 351.2 Rev. 2.0	10/20/2020	10/23/2020 14:00	David Boose	10/26/2020 12:40	Elliott Rodriguez	2203457
	10/20/2020	10/23/2020 14:00	David Boose	10/26/2020 12:42	Elliott Rodriguez	2203460
	10/20/2020	10/23/2020 14:00	David Boose	10/26/2020 12:44	Elliott Rodriguez	2203463
EPA 353.2 Rev. 2.0	10/20/2020			10/21/2020 10:33	Beverly Y. Sanders	2203457
	10/20/2020			10/21/2020 10:34	Beverly Y. Sanders	2203460
	10/20/2020			10/21/2020 10:35	Beverly Y. Sanders	2203463
EPA 365.1 Rev. 2.0	10/20/2020	10/26/2020 13:20	Yen Ta	10/27/2020 12:26	Benjamin T. Nordmann	2203457
	10/20/2020	10/26/2020 13:20	Yen Ta	10/27/2020 12:28	Benjamin T. Nordmann	2203460
	10/20/2020	10/26/2020 13:20	Yen Ta	10/27/2020 15:13	Shengyu Wang	2203463
EPA 365.1 Rev. 2.0 dissolved	10/20/2020			10/20/2020 16:37	Samantha Davila	2203458
	10/20/2020			10/20/2020 16:38	Samantha Davila	2203461
	10/20/2020			10/20/2020 16:40	Samantha Davila	2203464
EPA 8276	10/20/2020	10/22/2020 08:30	Rasheda Ghaffari	10/27/2020 05:20	Michael Poppell	2203468
EPA 8321B	10/20/2020	10/20/2020 13:30	Hoor Shaik	10/22/2020 04:24	Juyoung Kim	2203469
	10/20/2020	10/22/2020 10:00	Rebecca Ware	10/22/2020 14:17	Rebecca Ware	2203469
	10/20/2020	10/22/2020 10:00	Rebecca Ware	10/23/2020 11:08	Rebecca Ware	2203469
	10/20/2020	10/22/2020 10:00	Rebecca Ware	10/26/2020 13:10	Rebecca Ware	2203469
SM 2120 B-2011	10/20/2020			10/20/2020 17:20	Benjamin T. Nordmann	2203456
	10/20/2020			10/20/2020 17:21	Benjamin T. Nordmann	2203459
	10/20/2020			10/20/2020 17:22	Benjamin T. Nordmann	2203462
SM 2320 B-2011	10/20/2020			10/24/2020 00:27	Samantha Davila	2203462
	10/20/2020			10/24/2020 01:28	Samantha Davila	2203456
	10/20/2020			10/24/2020 01:38	Samantha Davila	2203459
SM 2540 C-2011	10/20/2020			10/21/2020 15:19	Yijie Li	2203456, 2203459, 2203462
SM 2540 D-2011	10/20/2020			10/21/2020 15:19	Yijie Li	2203456, 2203459, 2203462
SM 4500 F-C-2011	10/20/2020			10/22/2020 10:47	Samantha Davila	2203456
	10/20/2020			10/22/2020 10:59	Samantha Davila	2203459
	10/20/2020			10/22/2020 11:09	Samantha Davila	2203462
SM 5310 B-2011	10/20/2020			10/21/2020 22:11	Lauren Lees	2203460
	10/20/2020			10/22/2020 00:27	Lauren Lees	2203457
	10/20/2020			10/22/2020 00:39	Lauren Lees	2203463