

Chemical Analysis Report

SE-DIST-2020-06-02-01

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

Event Description: **SMP- June 3210C + Blank**
Request ID: **RQ-2020-06-01-42**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 19-JUN-2020 10:00

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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: South Fork SLR @ Hosford Park

Collection Date/Time: 06/01/2020 13:30

Field ID: G2SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2174186	EPA 180.1 Rev. 2.0	Turbidity	2.9	A	NTU	P382754	
	EPA 300.0 Rev. 2.1	Bromide	0.091		mg Br/L	P382859	
	SM 2320 B-2011	Total Alkalinity	63		mg CaCO3/L	P382856	
	SM 2540 D-2011	TSS	3	I	mg/L	P383039	
	SM 4500 F-C-2011	Fluoride	0.077	I	mg F/L	P382858	
2174188	EPA 350.1 Rev. 2.0	Ammonia-N	0.085		mg N/L	P382873	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P382949	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P382740	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P382758	
	SM 5310 B-2011	Organic Carbon	25		mg C/L	P382837	
2174190	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P382731	
2174196	EPA 8321B	2,4-D	0.0098		ug/L	P382647	
		Acesulfame K**	0.10	U	ug/L	P382790	
		AMPA**	0.24	I	ug/L	P382790	
		Sucralose**	0.38		ug/L	P382790	
		Acetaminophen**	0.0080	U	ug/L	P382647	
		Acetamiprid**	0.0020	U	ug/L	P382647	
		Endothall**	0.25	U	ug/L	P382790	
		Glufosinate**	0.10	U	ug/L	P382790	
		Glyphosate**	1.0		ug/L	P382790	
		Afidopyropen**	0.0020	U	ug/L	P382647	
		Bentazon	0.0063		ug/L	P382647	
		Benzovindiflupyr**	0.0020	U	ug/L	P382647	
		Carbamazepine**	8.0E-04	U	ug/L	P382647	
		Clothianidin**	0.0020	U	ug/L	P382647	
		Dinotefuran**	0.0020	U	ug/L	P382647	
		Diuron	0.0048	I	ug/L	P382647	
		Fenuron	0.016	U	ug/L	P382647	
		Fluridone**	0.010		ug/L	P382647	
		Imazapyr**	0.042		ug/L	P382647	
		Hydrocodone**	0.0020	U	ug/L	P382647	
		Ibuprofen**	0.020	U	ug/L	P382647	
		Imidacloprid	0.067		ug/L	P382647	MS
		Linuron	0.0040	U	ug/L	P382647	
		Mandestrobin**	0.0020	U	ug/L	P382647	
		MCP	0.0020	U	ug/L	P382647	
		Naproxen**	0.0080	U	ug/L	P382647	
		Primidone**	0.0040	U	ug/L	P382647	
		Pyraclostrobin**	0.0020	U	ug/L	P382647	
		Thiamethoxam**	0.0020	U	ug/L	P382647	
		Tolfenpyrad**	0.0020	U	ug/L	P382647	
		Triclopyr**	0.0040	U	ug/L	P382647	

Sample Location: South Fork SLR @ Hosford Park

Collection Date/Time: 06/01/2020 13:40

Field ID: FB_06012020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2174187	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P382754	
	EPA 300.0 Rev. 2.1	Bromide	0.013	U	mg Br/L	P382859	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P382856	
	SM 2540 D-2011	TSS	2	U	mg/L	P383036	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P382858	
2174189	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P382873	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P382949	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P382740	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P383097	MS
	SM 5310 B-2011	Organic Carbon	0.55	I	mg C/L	P382837	
2174191	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P382731	
2174197	EPA 8321B	2,4-D	0.0020	U	ug/L	P382851	
		Acesulfame K**	0.10	U	ug/L	P382790	
		AMPA**	0.10	U	ug/L	P382790	
		Sucralose**	0.010	U	ug/L	P382790	
		Acetaminophen**	0.0080	U	ug/L	P382851	
		Acetamiprid**	0.0020	U	ug/L	P382851	
		Endothall**	0.25	U	ug/L	P382790	
		Glufosinate**	0.10	U	ug/L	P382790	
		Glyphosate**	0.10	U	ug/L	P382790	
		Afidopyropen**	0.0020	U	ug/L	P382851	
		Bentazon	8.0E-04	U	ug/L	P382851	
		Benzovindiflupyr**	0.0020	U	ug/L	P382851	
		Carbamazepine**	8.0E-04	U	ug/L	P382851	
		Clothianidin**	0.0020	U	ug/L	P382851	MS
		Dinotefuran**	0.0020	U	ug/L	P382851	
		Diuron	0.0020	U	ug/L	P382851	
		Fenuron	0.016	U	ug/L	P382851	
		Fluridone**	8.0E-04	U	ug/L	P382851	
		Imazapyr**	0.0040	U	ug/L	P382851	MS
		Hydrocodone**	0.0020	U	ug/L	P382851	
		Ibuprofen**	0.020	U	ug/L	P382851	
		Imidacloprid	0.0020	U	ug/L	P382851	MS
		Linuron	0.0040	U	ug/L	P382851	
		Mandestrobin**	0.0020	U	ug/L	P382851	
		MCPP	0.0020	U	ug/L	P382851	
		Naproxen**	0.0080	U	ug/L	P382851	
		Primidone**	0.0040	U	ug/L	P382851	
		Pyraclostrobin**	0.0020	U	ug/L	P382851	
		Thiamethoxam**	0.0020	U	ug/L	P382851	
		Tolfenpyrad**	0.0020	U	ug/L	P382851	
		Triclopyr**	0.0040	U	ug/L	P382851	

Field ID: FB_06012020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-2011: The result was confirmed on 06/08/2020.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P382754

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382859

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382873

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P382949

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382740

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382758

Component	Result	Code	Units
Total-P	0.005	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383097

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382731

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

Reference Method: EPA 8321B
Batch ID: P382647

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyrophen	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P382647

Component	Result	Code	Units
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: P382790

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: EPA 8321B
Batch ID: P382851

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P382851

Component	Result	Code	Units
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: SM 2320 B-2011
Batch ID: P382856

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

Reference Method: SM 2540 D-2011
Batch ID: P383036

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P383039

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P382858

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P382837

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: P382859

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382873

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P382949

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382740

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382758

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383097

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.1		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P382647

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	116		P	30 - 160
Acetaminophen	84.4		P	30 - 160
Acetamiprid	83.0		P	30 - 160
Afidopyropen	82.5		P	30 - 160
Bentazon	63.2		P	30 - 160
Benzovindiflupyr	83.3		P	30 - 160
Carbamazepine	73.6		P	30 - 160
Clothianidin	91.9		P	30 - 160
Dinotefuran	89.6		P	30 - 160
Diuron	60.7		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P382647

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	93.7		P	30 - 160
Fluridone	90.8		P	30 - 160
Hydrocodone	82.5		P	30 - 160
Ibuprofen	98.0		P	30 - 160
Imazapyr	76.1		P	30 - 160
Imidacloprid	102		P	30 - 160
Linuron	63.0		P	30 - 160
Mandestrobin	98.7		P	30 - 160
MCPP	130		P	30 - 160
Naproxen	97.3		P	30 - 160
Primidone	93.1		P	30 - 160
Pyraclostrobin	89.1		P	30 - 160
Thiamethoxam	82.9		P	30 - 160
Tolfenpyrad	56.2		P	30 - 160
Triclopyr	92.8		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P382790

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	86.3		P	40 - 150
AMPA	82.9		P	40 - 150
Endothall	110		P	40 - 150
Glufosinate	101		P	40 - 150
Glyphosate	103		P	40 - 140
Sucralose	117		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P382851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	139		P	30 - 160
Acetaminophen	80.4		P	30 - 160
Acetamiprid	78.0		P	30 - 160
Afidopyropen	70.2		P	30 - 160
Bentazon	47.5		P	30 - 160
Benzovindiflupyr	56.5		P	30 - 160
Carbamazepine	61.6		P	30 - 160
Clothianidin	85.3		P	30 - 160
Dinotefuran	89.2		P	30 - 160
Diuron	52.9		P	30 - 160
Fenuron	89.2		P	30 - 160
Fluridone	84.2		P	30 - 160
Hydrocodone	72.8		P	30 - 160
Ibuprofen	81.5		P	30 - 160
Imazapyr	53.4		P	30 - 160
Imidacloprid	100		P	30 - 160
Linuron	52.2		P	30 - 160
Mandestrobin	74.6		P	30 - 160
MCPP	122		P	30 - 160
Naproxen	68.4		P	30 - 160
Primidone	82.9		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P382851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	65.4		P	30 - 160
Thiamethoxam	78.2		P	30 - 160
Tolfenpyrad	45.7		P	30 - 160
Triclopyr	92.5		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P382856

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

Reference Method: SM 4500 F-C-2011
Batch ID: P382858

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P382837

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174186	Bromide	97.1	95.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174268	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P382949

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174072	Kjeldahl Nitrogen	103	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382740

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174152	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382758

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174182	Total-P	107	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383097

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174067	Total-P	110	105	F/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382731

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174069	O-Phosphate-P	96.2	96.7	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P382647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2173323	2,4-D	126	127	P/P	30 - 160
2173323	Acetaminophen	101	99.2	P/P	30 - 160
2173323	Acetamiprid	80.4	83.6	P/P	30 - 160
2173323	Afidopyropen	87.3	87.5	P/P	30 - 160
2173323	Bentazon	59.0	56.8	P/P	30 - 160
2173323	Benzovindiflupyr	79.2	79.4	P/P	30 - 160
2173323	Carbamazepine	72.1	69.5	P/P	30 - 160
2173323	Clothianidin	114	107	P/P	30 - 160
2173323	Dinotefuran	109	104	P/P	30 - 160
2173323	Diuron	56.7	54.4	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P382647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2173323	Fenuron	81.2	78.6	P/P	30 - 160
2173323	Fluridone	87.4	85.6	P/P	30 - 160
2173323	Hydrocodone	78.8	72.9	P/P	30 - 160
2173323	Ibuprofen	101	89.9	P/P	30 - 160
2173323	Imazapyr	113	112	P/P	30 - 160
2173323	Imidacloprid	161	154	F/P	30 - 160
2173323	Linuron	65.2	65.1	P/P	30 - 160
2173323	Mandestrobin	93.8	90.9	P/P	30 - 160
2173323	MCP	126	126	P/P	30 - 160
2173323	Naproxen	83.1	89.5	P/P	30 - 160
2173323	Primidone	97.3	103	P/P	30 - 160
2173323	Pyraclostrobin	94.3	90.1	P/P	30 - 160
2173323	Thiamethoxam	102	99.0	P/P	30 - 160
2173323	Tolfenpyrad	59.4	61.4	P/P	30 - 160
2173323	Triclopyr	106	103	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P382790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174040	Acesulfame K	70.8	59.2	P/P	40 - 150
2174040	AMPA	113	120	P/P	40 - 150
2174040	Endothall	111	119	P/P	40 - 150
2174040	Glufosinate	108	108	P/P	40 - 150
2174040	Glyphosate	122	123	P/P	40 - 140
2174040	Sucralose	117	107	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P382851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174477	2,4-D	78.4	77.2	P/P	30 - 160
2174477	Acetaminophen	146	140	P/P	30 - 160
2174477	Acetamiprid	59.7	61.2	P/P	30 - 160
2174477	Afidopyropen	48.9	51.6	P/P	30 - 160
2174477	Bentazon	30.5	33.2	P/P	30 - 160
2174477	Benzovindiflupyr	56.5	51.6	P/P	30 - 160
2174477	Carbamazepine	74.8	69.1	P/P	30 - 160
2174477	Clothianidin	177	151	F/P	30 - 160
2174477	Dinotefuran	118	117	P/P	30 - 160
2174477	Diuron	52.3	50.5	P/P	30 - 160
2174477	Fenuron	60.8	59.2	P/P	30 - 160
2174477	Fluridone	87.3	82.8	P/P	30 - 160
2174477	Hydrocodone	80.8	78.8	P/P	30 - 160
2174477	Ibuprofen	64.9	59.6	P/P	30 - 160
2174477	Imazapyr	24.1	31.5	F/P	30 - 160
2174477	Imidacloprid	313	272	F/F	30 - 160
2174477	Linuron	56.9	52.7	P/P	30 - 160
2174477	Mandestrobin	69.4	69.8	P/P	30 - 160
2174477	MCP	57.1	73.5	P/P	30 - 160
2174477	Naproxen	70.4	66.6	P/P	30 - 160
2174477	Primidone	111	100	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P382851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174477	Pyraclostrobin	62.9	59.6	P/P	30 - 160
2174477	Thiamethoxam	131	126	P/P	30 - 160
2174477	Tolfenpyrad	42.5	41.9	P/P	30 - 160
2174477	Triclopyr	59.8	61.4	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P382858

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174438	Fluoride	98.8	101	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P382837

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174266	Organic Carbon	99.4	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P382754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174186	Turbidity	3.80	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174186	Bromide	1.24	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174268	Ammonia-N	0.262	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P382949

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174072	Kjeldahl Nitrogen	0.582	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382740

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174152	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382758

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174182	Total-P	0.335	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174067	Total-P	4.50	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382731

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174069	O-Phosphate-P	0.518	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P382647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2173323	2,4-D	1.01	Spike	P	0 - 30
2173323	Acetaminophen	1.83	Spike	P	0 - 30
2173323	Acetamiprid	3.96	Spike	P	0 - 30
2173323	Afidopyropen	0.199	Spike	P	0 - 30
2173323	Bentazon	3.78	Spike	P	0 - 30
2173323	Benzovindiflupyr	0.304	Spike	P	0 - 30
2173323	Carbamazepine	3.42	Spike	P	0 - 30
2173323	Clothianidin	6.50	Spike	P	0 - 30
2173323	Dinotefuran	4.92	Spike	P	0 - 30
2173323	Diuron	3.90	Spike	P	0 - 30
2173323	Fenuron	3.32	Spike	P	0 - 30
2173323	Fluridone	2.10	Spike	P	0 - 30
2173323	Hydrocodone	7.78	Spike	P	0 - 30
2173323	Ibuprofen	11.5	Spike	P	0 - 30
2173323	Imazapyr	1.55	Spike	P	0 - 30
2173323	Imidacloprid	4.71	Spike	P	0 - 30
2173323	Linuron	0.161	Spike	P	0 - 30
2173323	Mandestrobin	3.21	Spike	P	0 - 30
2173323	MCPP	0.183	Spike	P	0 - 30
2173323	Naproxen	7.45	Spike	P	0 - 30
2173323	Primidone	5.25	Spike	P	0 - 30
2173323	Pyraclostrobin	4.58	Spike	P	0 - 30
2173323	Thiamethoxam	2.47	Spike	P	0 - 30
2173323	Tolfenpyrad	3.45	Spike	P	0 - 30
2173323	Triclopyr	2.74	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P382790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174040	Acesulfame K	17.7	Spike	P	0 - 30
2174040	AMPA	6.08	Spike	P	0 - 30
2174040	Endothall	7.11	Spike	P	0 - 30
2174040	Glufosinate	0.330	Spike	P	0 - 30
2174040	Glyphosate	0.212	Spike	P	0 - 30
2174040	Sucralose	8.26	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P382851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174477	2,4-D	1.44	Spike	P	0 - 30
2174477	Acetaminophen	4.01	Spike	P	0 - 30
2174477	Acetamiprid	2.55	Spike	P	0 - 30
2174477	Afidopyropen	5.38	Spike	P	0 - 30
2174477	Bentazon	3.06	Spike	P	0 - 30
2174477	Benzovindiflupyr	9.02	Spike	P	0 - 30
2174477	Carbamazepine	4.91	Spike	P	0 - 30
2174477	Clothianidin	16.2	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P382851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174477	Dinotefuran	0.176	Spike	P	0 - 30
2174477	Diuron	3.12	Spike	P	0 - 30
2174477	Fenuron	1.31	Spike	P	0 - 30
2174477	Fluridone	4.96	Spike	P	0 - 30
2174477	Hydrocodone	2.43	Spike	P	0 - 30
2174477	Ibuprofen	8.52	Spike	P	0 - 30
2174477	Imazapyr	16.9	Spike	P	0 - 30
2174477	Imidacloprid	13.6	Spike	P	0 - 30
2174477	Linuron	7.73	Spike	P	0 - 30
2174477	Mandestrobin	0.607	Spike	P	0 - 30
2174477	MCPP	25.1	Spike	P	0 - 30
2174477	Naproxen	5.53	Spike	P	0 - 30
2174477	Primidone	9.80	Spike	P	0 - 30
2174477	Pyraclostrobin	5.44	Spike	P	0 - 30
2174477	Thiamethoxam	4.09	Spike	P	0 - 30
2174477	Tolfenpyrad	1.40	Spike	P	0 - 30
2174477	Triclopyr	2.74	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P382856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174438	Total Alkalinity	2.54	Sample	P	0 - 8.1

Reference Method: SM 2540 D-2011
Batch ID: P383039

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174580	TSS	8.45	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P382858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174438	Fluoride	0.972	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P382837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174266	Organic Carbon	1.43	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2174196
Field Sample ID: G2SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.4	P	30 - 160
EPA 8321B	Diuron-d6	45.9	P	30 - 160
EPA 8321B	Endothall-d6	132	P	30 - 160
EPA 8321B	Endothall-d6	132	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	153	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	153	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.8	P	30 - 160
EPA 8321B	Primidone-d5	72.2	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Lab Sample ID: 2174197
Field Sample ID: FB_06012020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	52.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	124	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.7	P	30 - 160
EPA 8321B	Diuron-d6	70.6	P	30 - 160
EPA 8321B	Endothall-d6	94.0	P	30 - 160
EPA 8321B	Endothall-d6	94.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.4	P	30 - 160
EPA 8321B	Primidone-d5	94.7	P	30 - 160
EPA 8321B	Sucralose-d6	117	P	30 - 160
EPA 8321B	Sucralose-d6	117	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A99133

Included Lab Sample IDs: 2174190, 2174191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.8	96.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A99141

Included Lab Sample IDs: 2174188, 2174189

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A99144

Included Lab Sample IDs: 2174186, 2174187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A99145

Included Lab Sample IDs: 2174196

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	119	83.1	P/P	50 - 150
Acetaminophen	106	106	P/P	60 - 160
Acetamiprid	121	123	P/P	50 - 150
Afidopyropen	112	118	P/P	50 - 150
Bentazon	96.7	114	P/P	50 - 160
Benzovindiflupyr	105	108	P/P	50 - 150
Carbamazepine	110	115	P/P	60 - 150
Clothianidin	106	112	P/P	60 - 150
Dinotefuran	115	103	P/P	50 - 150
Diuron	83.8	101	P/P	60 - 160
Fenuron	114	115	P/P	60 - 150
Fluridone	120	124	P/P	60 - 160
Hydrocodone	111	114	P/P	60 - 150
Ibuprofen	94.2	125	P/P	50 - 160
Imazapyr	93.7	111	P/P	50 - 150
Imidacloprid	111	111	P/P	60 - 150
Linuron	101	109	P/P	60 - 150
Mandestrobin	123	125	P/P	50 - 150
MCPP	128	132	P/P	50 - 150
Naproxen	119	125	P/P	50 - 160
Primidone	104	107	P/P	60 - 150
Pyraclostrobin	104	110	P/P	60 - 150
Thiamethoxam	108	112	P/P	50 - 150
Tolfenpyrad	105	104	P/P	60 - 150
Triclopyr	93.7	99.3	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A99158

Included Lab Sample IDs: 2174188

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

Reference Method: SM 5310 B-2011

Run ID: A99176

Included Lab Sample IDs: 2174188, 2174189

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.6	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A99184

Included Lab Sample IDs: 2174196, 2174197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	72.9	89.9	P/P	30 - 200
Acesulfame K	95.0	72.9	P/P	30 - 200
Endothall	120	121	P/P	30 - 200
Endothall	95.6	120	P/P	30 - 200

Reference Method: SM 2320 B-2011

Run ID: A99185

Included Lab Sample IDs: 2174186, 2174187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	95.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A99185

Included Lab Sample IDs: 2174186, 2174187

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A99186

Included Lab Sample IDs: 2174186, 2174187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	96.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A99191

Included Lab Sample IDs: 2174188, 2174189

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A99206

Included Lab Sample IDs: 2174196, 2174197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	90.9	P/P	30 - 200
AMPA	98.5	102	P/P	30 - 200
Glufosinate	89.5	90.8	P/P	30 - 200
Glufosinate	93.4	89.5	P/P	30 - 200
Glyphosate	93.6	94.7	P/P	30 - 200
Glyphosate	95.5	93.6	P/P	30 - 200

Reference Method: EPA 8321B

Run ID: A99216

Included Lab Sample IDs: 2174197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	109	62.3	P/P	50 - 150
Acetaminophen	104	135	P/P	60 - 160
Acetamiprid	122	109	P/P	50 - 150
Afidopyropen	112	85.1	P/P	50 - 150
Bentazon	98.7	90.9	P/P	50 - 160
Benzovindiflupyr	96.0	102	P/P	50 - 150
Carbamazepine	107	107	P/P	60 - 150
Clothianidin	103	138	P/P	60 - 150
Dinotefuran	97.9	110	P/P	50 - 150
Diuron	96.1	100	P/P	60 - 160
Fenuron	109	107	P/P	60 - 150
Fluridone	109	119	P/P	60 - 160
Hydrocodone	101	117	P/P	60 - 150
Ibuprofen	126	65.5	P/P	50 - 160
Imazapyr	88.1	62.6	P/P	50 - 150
Imidacloprid	95.4	144	P/P	60 - 150
Linuron	98.4	112	P/P	60 - 150
Mandestrobin	107	111	P/P	50 - 150
MCPP	93.9	70.1	P/P	50 - 150
Naproxen	100	80.8	P/P	50 - 160
Primidone	92.3	109	P/P	60 - 150
Pyraclostrobin	91.7	93.7	P/P	60 - 150
Thiamethoxam	113	145	P/P	50 - 150
Tolfenpyrad	103	110	P/P	60 - 150
Triclopyr	67.2	61.7	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A99222

Included Lab Sample IDs: 2174196, 2174197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	105	119	P/P	30 - 200
Sucralose	119	108	P/P	30 - 200

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A99244

Included Lab Sample IDs: 2174188, 2174189

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A99244

Included Lab Sample IDs: 2174188, 2174189

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	93.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A99336

Included Lab Sample IDs: 2174189

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.5	95.8	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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					3.80	
EPA 300.0 Rev. 2.1	Bromide	98.9	97.1	95.7			1.24
EPA 350.1 Rev. 2.0	Ammonia-N	101	102	102			0.262
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	103	103			0.582
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	102	101			0.494
EPA 365.1 Rev. 2.0	Total-P	105	107	106			0.335
	Total-P	105	110	105			4.50
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	95.1	96.2	96.7			0.518
EPA 8321B	2,4-D	116	126	127			1.01
	2,4-D	139	78.4	77.2			1.44
	Acesulfame K	86.3	70.8	59.2			17.7
	Acetaminophen	84.4	101	99.2			1.83
	Acetaminophen	80.4	146	140			4.01
	Acetamiprid	83.0	80.4	83.6			3.96
	Acetamiprid	78.0	59.7	61.2			2.55
	Afidopyropen	82.5	87.3	87.5			0.199
	Afidopyropen	70.2	48.9	51.6			5.38
	AMPA	82.9	113	120			6.08
	Bentazon	63.2	59.0	56.8			3.78
	Bentazon	47.5	30.5	33.2			3.06
	Benzovindiflupyr	83.3	79.2	79.4			0.304
	Benzovindiflupyr	56.5	56.5	51.6			9.02
	Carbamazepine	73.6	72.1	69.5			3.42
	Carbamazepine	61.6	74.8	69.1			4.91
	Clothianidin	91.9	114	107			6.50
	Clothianidin	85.3	177	151			16.2
	Dinotefuran	89.6	109	104			4.92
	Dinotefuran	89.2	118	117			0.176
	Diuron	60.7	56.7	54.4			3.90
	Diuron	52.9	52.3	50.5			3.12
	Endothall	110	111	119			7.11
	Fenuron	93.7	81.2	78.6			3.32
	Fenuron	89.2	60.8	59.2			1.31
	Fluridone	90.8	87.4	85.6			2.10
	Fluridone	84.2	87.3	82.8			4.96
	Glufosinate	101	108	108			0.330
	Glyphosate	103	122	123			0.212
	Hydrocodone	82.5	78.8	72.9			7.78
	Hydrocodone	72.8	80.8	78.8			2.43
	Ibuprofen	98.0	101	89.9			11.5
	Ibuprofen	81.5	64.9	59.6			8.52
	Imazapyr	76.1	113	112			1.55
	Imazapyr	53.4	24.1	31.5			16.9
	Imidacloprid	102	161	154			4.71
	Imidacloprid	100	313	272			13.6
	Linuron	63.0	65.2	65.1			0.161
	Linuron	52.2	56.9	52.7			7.73
	Mandestrobin	98.7	93.8	90.9			3.21
	Mandestrobin	74.6	69.4	69.8			0.607
	MCPP	130	126	126			0.183
	MCPP	122	57.1	73.5			25.1
	Naproxen	97.3	83.1	89.5			7.45
	Naproxen	68.4	70.4	66.6			5.53
	Primidone	93.1	97.3	103			5.25

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Primidone	82.9	111	100		9.80
	Pyraclostrobin	89.1	94.3	90.1		4.58
	Pyraclostrobin	65.4	62.9	59.6		5.44
	Sucralose	117	117	107		8.26
	Thiamethoxam	82.9	102	99.0		2.47
	Thiamethoxam	78.2	131	126		4.09
	Tolfenpyrad	56.2	59.4	61.4		3.45
	Tolfenpyrad	45.7	42.5	41.9		1.40
	Triclopyr	92.8	106	103		2.74
	Triclopyr	92.5	59.8	61.4		2.74
SM 2320 B-2011	Total Alkalinity	101				2.54
SM 2540 D-2011	TSS					8.45
SM 4500 F-C-2011	Fluoride	101	98.8	101		0.972
SM 5310 B-2011	Organic Carbon	98.8	99.4	102		1.43

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2174186, 2174187
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2174186, 2174187
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2174188, 2174189
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2174188, 2174189
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2174188, 2174189
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2174188, 2174189
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2174190, 2174191
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2174196, 2174197
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2174196, 2174197
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2174186, 2174187
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2174186, 2174187
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2174186, 2174187
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2174188, 2174189

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	06/02/2020			06/02/2020 15:16	Blanca Fach	2174186, 2174187
EPA 300.0 Rev. 2.1	06/02/2020			06/04/2020 22:36	Elliott Rodriguez	2174186
	06/02/2020			06/04/2020 23:27	Elliott Rodriguez	2174187
EPA 350.1 Rev. 2.0	06/02/2020			06/06/2020 12:32	Ping Hua	2174188
	06/02/2020			06/06/2020 12:34	Ping Hua	2174189
EPA 351.2 Rev. 2.0	06/02/2020	06/09/2020 10:30	Sima Feizi	06/10/2020 13:28	Jhamieka S. Greenwood	2174188
	06/02/2020	06/09/2020 10:30	Sima Feizi	06/10/2020 13:29	Jhamieka S. Greenwood	2174189
EPA 353.2 Rev. 2.0	06/02/2020			06/03/2020 09:16	Beverly Y. Sanders	2174188
	06/02/2020			06/03/2020 09:17	Beverly Y. Sanders	2174189
EPA 365.1 Rev. 2.0	06/02/2020	06/03/2020 12:55	Yen Ta	06/04/2020 09:02	Lipi Saha	2174188
	06/02/2020	06/11/2020 11:45	Yen Ta	06/16/2020 08:35	Lipi Saha	2174189
EPA 365.1 Rev. 2.0 dissolved	06/02/2020			06/02/2020 16:19	Jhamieka S. Greenwood	2174191
	06/02/2020			06/02/2020 16:20	Jhamieka S. Greenwood	2174190
EPA 8321B	06/02/2020	06/02/2020 13:30	Hoor Shaik	06/03/2020 06:35	Juyoung Kim	2174196
	06/02/2020	06/04/2020 10:30	Rebecca Ware	06/04/2020 13:10	Rebecca Ware	2174197
	06/02/2020	06/04/2020 10:30	Rebecca Ware	06/04/2020 15:48	Rebecca Ware	2174196
	06/02/2020	06/04/2020 10:30	Rebecca Ware	06/05/2020 13:44	Rebecca Ware	2174197
	06/02/2020	06/04/2020 10:30	Rebecca Ware	06/05/2020 15:44	Rebecca Ware	2174196
	06/02/2020	06/04/2020 10:30	Rebecca Ware	06/08/2020 14:12	Rebecca Ware	2174197
	06/02/2020	06/04/2020 10:30	Rebecca Ware	06/08/2020 16:25	Rebecca Ware	2174196
	06/02/2020	06/08/2020 10:00	Hoor Shaik	06/08/2020 19:33	Juyoung Kim	2174197
SM 2320 B-2011	06/02/2020			06/05/2020 02:21	Dale L. Simmons	2174186
	06/02/2020			06/05/2020 02:30	Dale L. Simmons	2174187
SM 2540 D-2011	06/02/2020			06/05/2020 16:02	Yijie Li	2174186, 2174187
SM 4500 F-C-2011	06/02/2020			06/05/2020 02:21	Dale L. Simmons	2174186
	06/02/2020			06/05/2020 02:30	Dale L. Simmons	2174187
SM 5310 B-2011	06/02/2020			06/04/2020 18:14	David Boose	2174188
	06/02/2020			06/04/2020 18:26	David Boose	2174189