

Chemical Analysis Report

SO-DIST-2020-03-03-01

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

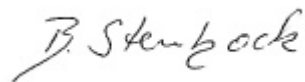
Event Description: **SMP: Caloosa Creeks Sites**
Request ID: **RQ-2020-03-02-16**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Miranda Carroll

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

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 19-MAR-2020 15:03



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 group are included in this report: 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: Telegraph Creek

Collection Date/Time: 03/02/2020 09:40

Field ID: G3SD0129

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2161361	EPA 8321B	2,4-D	0.0057	I	ug/L	P380128	
		Acesulfame K**	0.10	U	ug/L	P379958	MS
		AMPA**	0.10	U	ug/L	P379958	
		Sucralose**	0.034	I	ug/L	P379958	
		Acetaminophen**	0.0080	U	ug/L	P380128	
		Acetamiprid**	0.0020	U	ug/L	P380128	
		Endothall**	0.25	U	ug/L	P379958	MS
		Glufosinate**	0.10	U	ug/L	P379958	
		Glyphosate**	0.10	U	ug/L	P379958	MS
		Afidopyropen**	0.0020	UJ	ug/L	P380128	
		Bentazon	0.0043		ug/L	P380128	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P380128	
		Carbamazepine**	8.0E-04	U	ug/L	P380128	
		Clothianidin**	0.0020	U	ug/L	P380128	
		Dinotefuran**	0.0020	U	ug/L	P380128	
		Diuron	0.0020	U	ug/L	P380128	
		Fenuron	0.016	U	ug/L	P380128	
		Fluridone**	10E-04	I	ug/L	P380128	
		Imazapyr**	0.095		ug/L	P380128	
		Hydrocodone**	0.0020	U	ug/L	P380128	
		Ibuprofen**	0.020	U	ug/L	P380128	
		Imidacloprid	0.0028	I	ug/L	P380128	
		Linuron	0.0040	U	ug/L	P380128	
		Mandestrobin**	0.0020	UJ	ug/L	P380128	
		MCPP	0.0020	U	ug/L	P380128	
		Naproxen**	0.0080	UJ	ug/L	P380128	RPD
		Primidone**	0.0040	U	ug/L	P380128	
		Pyraclostrobin**	0.0020	U	ug/L	P380128	
		Thiamethoxam**	0.0020	U	ug/L	P380128	
		Tolfenpyrad**	0.0020	U	ug/L	P380128	
		Triclopyr**	0.0040	U	ug/L	P380128	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Orange River

Collection Date/Time: 03/02/2020 10:25

Field ID: G3SD0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2161362	EPA 8321B	2,4-D	0.0021	I	ug/L	P380128	
		Acesulfame K**	0.10	U	ug/L	P379958	MS
		AMPA**	0.10	U	ug/L	P379958	
		Sucralose**	0.49		ug/L	P379958	
		Acetaminophen**	0.0080	U	ug/L	P380128	
		Acetamiprid**	0.0020	U	ug/L	P380128	
		Endothall**	0.25	U	ug/L	P379958	MS
		Glufosinate**	0.10	U	ug/L	P379958	
		Glyphosate**	0.10	U	ug/L	P379958	MS
		Afidopyropen**	0.0020	UJ	ug/L	P380128	
		Bentazon	0.022		ug/L	P380128	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P380128	
		Carbamazepine**	0.0049		ug/L	P380128	
		Clothianidin**	0.0020	U	ug/L	P380128	
		Dinotefuran**	0.0020	U	ug/L	P380128	
		Diuron	0.0020	U	ug/L	P380128	
		Fenuron	0.016	U	ug/L	P380128	
		Fluridone**	0.0099		ug/L	P380128	
		Imazapyr**	0.42		ug/L	P380128	
		Hydrocodone**	0.0020	U	ug/L	P380128	
		Ibuprofen**	0.020	U	ug/L	P380128	
		Imidacloprid	0.0041	I	ug/L	P380128	
		Linuron	0.0040	U	ug/L	P380128	
		Mandestrobin**	0.0020	UJ	ug/L	P380128	
		MCPP	0.0020	U	ug/L	P380128	
		Naproxen**	0.0080	U	ug/L	P380128	RPD
		Primidone**	0.0040	U	ug/L	P380128	
		Pyraclostrobin**	0.0020	U	ug/L	P380128	
		Thiamethoxam**	0.0021	I	ug/L	P380128	
		Tolfenpyrad**	0.0020	U	ug/L	P380128	
		Triclopyr**	0.0040	U	ug/L	P380128	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P379958

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: P380128

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P379958

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	96.0		P	40 - 150
AMPA	97.8		P	40 - 150
Endothall	133		P	40 - 150
Glufosinate	123		P	40 - 150
Glyphosate	114		P	40 - 140
Sucralose	101		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P380128

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	127		P	30 - 160
Acetaminophen	109		P	30 - 160
Acetamiprid	91.6		P	30 - 160
Afidopyropen	81.1		P	30 - 160
Bentazon	89.6		P	30 - 160
Benzovindiflupyr	80.6		P	30 - 160
Carbamazepine	93.1		P	30 - 160
Clothianidin	93.9		P	30 - 160
Dinotefuran	114		P	30 - 160
Diuron	74.0		P	30 - 160
Fenuron	102		P	30 - 160
Fluridone	76.1		P	30 - 160
Hydrocodone	88.9		P	30 - 160
Ibuprofen	82.1		P	30 - 160
Imazapyr	93.5		P	30 - 160
Imidacloprid	99.2		P	30 - 160
Linuron	71.5		P	30 - 160
Mandestrobin	84.5		P	30 - 160
MCPP	120		P	30 - 160
Naproxen	102		P	30 - 160
Primidone	92.7		P	30 - 160
Pyraclostrobin	81.0		P	30 - 160
Thiamethoxam	95.3		P	30 - 160
Tolfenpyrad	40.0		P	30 - 160
Triclopyr	102		P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P379958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2161262	Acesulfame K	19.8	19.6	F/F	40 - 150
2161262	AMPA	70.8	70.8	P/P	40 - 150
2161262	Endothall	134	153	P/F	40 - 150
2161262	Glufosinate	109	124	P/P	40 - 150
2161262	Glyphosate	160	148	F/F	40 - 140
2161262	Sucralose	88.9	94.8	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P380128

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2161361	2,4-D	83.4	106	P/P	30 - 160
2161361	Acetaminophen	126	117	P/P	30 - 160
2161361	Acetamiprid	83.3	86.3	P/P	30 - 160
2161361	Afidopyropen	87.2	88.0	P/P	30 - 160
2161361	Bentazon	42.6	42.9	P/P	30 - 160
2161361	Benzovindiflupyr	86.6	80.7	P/P	30 - 160
2161361	Carbamazepine	73.9	74.2	P/P	30 - 160
2161361	Clothianidin	91.9	92.4	P/P	30 - 160
2161361	Dinotefuran	143	134	P/P	30 - 160
2161361	Diuron	65.1	61.0	P/P	30 - 160
2161361	Fenuron	77.1	74.8	P/P	30 - 160
2161361	Fluridone	79.9	65.1	P/P	30 - 160
2161361	Hydrocodone	88.4	85.6	P/P	30 - 160
2161361	Ibuprofen	78.2	67.9	P/P	30 - 160
2161361	Imidacloprid	157	145	P/P	30 - 160
2161361	Linuron	66.0	61.7	P/P	30 - 160
2161361	Mandestrobin	86.2	81.0	P/P	30 - 160
2161361	MCP	125	104	P/P	30 - 160
2161361	Naproxen	105	68.3	P/P	30 - 160
2161361	Primidone	96.6	89.8	P/P	30 - 160
2161361	Pyraclostrobin	99.5	83.6	P/P	30 - 160
2161361	Thiamethoxam	138	136	P/P	30 - 160
2161361	Tolfenpyrad	47.2	46.0	P/P	30 - 160
2161361	Triclopyr	105	99.7	P/P	30 - 160

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P379958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2161262	Acesulfame K	0.830	Spike	P	0 - 30
2161262	AMPA	0.00906	Spike	P	0 - 30
2161262	Endothall	13.4	Spike	P	0 - 30
2161262	Glufosinate	12.8	Spike	P	0 - 30
2161262	Glyphosate	1.65	Spike	P	0 - 30
2161262	Sucralose	3.75	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P380128

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2161361	2,4-D	22.3	Spike	P	0 - 30
2161361	Acetaminophen	7.86	Spike	P	0 - 30
2161361	Acetamiprid	3.60	Spike	P	0 - 30
2161361	Afidopyropen	0.972	Spike	P	0 - 30
2161361	Bentazon	0.354	Spike	P	0 - 30
2161361	Benzovindiflupyr	7.01	Spike	P	0 - 30
2161361	Carbamazepine	0.359	Spike	P	0 - 30
2161361	Clothianidin	0.562	Spike	P	0 - 30
2161361	Dinotefuran	6.70	Spike	P	0 - 30
2161361	Diuron	6.47	Spike	P	0 - 30
2161361	Fenuron	3.00	Spike	P	0 - 30
2161361	Fluridone	19.0	Spike	P	0 - 30
2161361	Hydrocodone	3.30	Spike	P	0 - 30
2161361	Ibuprofen	14.2	Spike	P	0 - 30
2161361	Imazapyr	2.13	Spike	P	0 - 30
2161361	Imidacloprid	7.96	Spike	P	0 - 30
2161361	Linuron	6.70	Spike	P	0 - 30
2161361	Mandestrobin	6.29	Spike	P	0 - 30
2161361	MCP	18.9	Spike	P	0 - 30
2161361	Naproxen	42.3	Spike	F	0 - 30
2161361	Primidone	7.29	Spike	P	0 - 30
2161361	Pyraclostrobin	17.3	Spike	P	0 - 30
2161361	Thiamethoxam	1.24	Spike	P	0 - 30
2161361	Tolfenpyrad	2.52	Spike	P	0 - 30
2161361	Triclopyr	5.53	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2161361
Field Sample ID: G3SD0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.4	P	30 - 160
EPA 8321B	Diuron-d6	47.8	P	30 - 160
EPA 8321B	Endothall-d6	151	P	30 - 160
EPA 8321B	Endothall-d6	151	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	44.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	44.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.3	P	30 - 160
EPA 8321B	Primidone-d5	85.2	P	30 - 160
EPA 8321B	Sucralose-d6	38.0	P	30 - 160
EPA 8321B	Sucralose-d6	38.0	P	30 - 160

Lab Sample ID: 2161362
Field Sample ID: G3SD0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.8	P	30 - 160
EPA 8321B	Diuron-d6	51.9	P	30 - 160
EPA 8321B	Endothall-d6	119	P	30 - 160
EPA 8321B	Endothall-d6	119	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.3	P	30 - 160
EPA 8321B	Primidone-d5	115	P	30 - 160
EPA 8321B	Sucralose-d6	34.7	P	30 - 160
EPA 8321B	Sucralose-d6	34.7	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98041

Included Lab Sample IDs: 2161361, 2161362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	64.3	99.5	P/P	40 - 200
Glufosinate	74.6	124	P/P	40 - 200
Glyphosate	77.0	124	P/P	40 - 200

Reference Method: EPA 8321B

Run ID: A98069

Included Lab Sample IDs: 2161361, 2161362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	101	95.7	P/P	60 - 160
Endothall	125	152	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A98193

Included Lab Sample IDs: 2161361, 2161362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	103	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A98214

Included Lab Sample IDs: 2161361, 2161362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	73.5	81.4	P/P	50 - 150
2,4-D	73.8	73.5	P/P	50 - 150
Acetaminophen	119	128	P/P	60 - 160
Acetaminophen	128	122	P/P	60 - 160
Acetamiprid	90.0	91.2	P/P	50 - 150
Acetamiprid	99.8	90.0	P/P	50 - 150
Afidopyropen	77.5	82.5	P/P	50 - 150
Afidopyropen	82.5	66.0	P/P	50 - 150
Bentazon	114	107	P/P	50 - 160
Bentazon	115	114	P/P	50 - 160
Benzovindiflupyr	91.5	96.6	P/P	50 - 150
Benzovindiflupyr	96.6	93.9	P/P	50 - 150
Carbamazepine	91.9	93.0	P/P	60 - 150
Carbamazepine	95.6	91.9	P/P	60 - 150
Clothianidin	108	88.8	P/P	60 - 150
Clothianidin	91.3	108	P/P	60 - 150
Dinotefuran	106	118	P/P	50 - 150
Dinotefuran	110	106	P/P	50 - 150
Diuron	74.9	76.9	P/P	60 - 150
Diuron	81.6	74.9	P/P	60 - 150
Fenuron	100	96.5	P/P	60 - 150
Fenuron	96.5	87.8	P/P	60 - 150
Fluridone	79.2	88.5	P/P	60 - 160
Fluridone	88.5	78.8	P/P	60 - 160
Hydrocodone	100	88.1	P/P	60 - 150
Hydrocodone	104	100	P/P	60 - 150
Ibuprofen	74.8	81.7	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98214

Included Lab Sample IDs: 2161361, 2161362

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	84.8	74.8	P/P	50 - 160
Imazapyr	100	93.2	P/P	50 - 150
Imazapyr	93.2	98.5	P/P	50 - 150
Imidacloprid	88.2	84.2	P/P	60 - 150
Imidacloprid	88.5	88.2	P/P	60 - 150
Linuron	79.7	85.9	P/P	60 - 150
Linuron	95.5	79.7	P/P	60 - 150
Mandestrobin	86.0	86.3	P/P	50 - 150
Mandestrobin	88.7	86.0	P/P	50 - 150
MCPD	65.5	65.8	P/P	50 - 150
MCPD	65.8	69.4	P/P	50 - 150
Naproxen	117	87.5	P/P	50 - 160
Naproxen	87.5	106	P/P	50 - 160
Primidone	87.7	93.4	P/P	60 - 150
Primidone	93.4	92.7	P/P	60 - 150
Pyraclostrobin	86.1	99.2	P/P	60 - 150
Pyraclostrobin	99.2	92.5	P/P	60 - 150
Thiamethoxam	92.6	95.3	P/P	50 - 150
Thiamethoxam	95.3	95.3	P/P	50 - 150
Tolfenpyrad	73.9	75.4	P/P	60 - 150
Tolfenpyrad	76.5	73.9	P/P	60 - 150
Triclopyr	66.8	76.1	P/P	50 - 150
Triclopyr	80.8	66.8	P/P	50 - 150

* 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 8321B	2,4-D	127	83.4	106		22.3
	Acesulfame K	96.0	19.8	19.6		0.830
	Acetaminophen	109	126	117		7.86
	Acetamiprid	91.6	83.3	86.3		3.60
	Afidopyropen	81.1	87.2	88.0		0.972
	AMPA	97.8	70.8	70.8		0.0090
	Bentazon	89.6	42.6	42.9		0.354
	Benzovindiflupyr	80.6	86.6	80.7		7.01
	Carbamazepine	93.1	73.9	74.2		0.359
	Clothianidin	93.9	91.9	92.4		0.562
	Dinotefuran	114	143	134		6.70
	Diuron	74.0	65.1	61.0		6.47
	Endothall	133	134	153		13.4
	Fenuron	102	77.1	74.8		3.00
	Fluridone	76.1	79.9	65.1		19.0
	Glufosinate	123	109	124		12.8
	Glyphosate	114	160	148		1.65
	Hydrocodone	88.9	88.4	85.6		3.30
	Ibuprofen	82.1	78.2	67.9		14.2
	Imazapyr	93.5				2.13
	Imidacloprid	99.2	157	145		7.96
	Linuron	71.5	66.0	61.7		6.70
	Mandestrobin	84.5	86.2	81.0		6.29
	MCPP	120	125	104		18.9
	Naproxen	102	105	68.3		42.3
	Primidone	92.7	96.6	89.8		7.29
	Pyraclostrobin	81.0	99.5	83.6		17.3
	Sucralose	101	88.9	94.8		3.75
	Thiamethoxam	95.3	138	136		1.24
	Tolfenpyrad	40.0	47.2	46.0		2.52
	Triclopyr	102	105	99.7		5.53

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2161361, 2161362
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2161361, 2161362

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/03/2020	03/03/2020 15:15	Rebecca Ware	03/03/2020 17:24	Rebecca Ware	2161361
	03/03/2020	03/03/2020 15:15	Rebecca Ware	03/03/2020 17:35	Rebecca Ware	2161362
	03/03/2020	03/03/2020 15:15	Rebecca Ware	03/04/2020 17:52	Rebecca Ware	2161361
	03/03/2020	03/03/2020 15:15	Rebecca Ware	03/04/2020 18:06	Rebecca Ware	2161362
	03/03/2020	03/03/2020 15:15	Rebecca Ware	03/13/2020 00:32	Rebecca Ware	2161361
	03/03/2020	03/03/2020 15:15	Rebecca Ware	03/13/2020 00:44	Rebecca Ware	2161362
	03/03/2020	03/06/2020 10:00	Hoor Shaik	03/11/2020 23:27	Juyoung Kim	2161361
	03/03/2020	03/06/2020 10:00	Hoor Shaik	03/12/2020 02:21	Juyoung Kim	2161362