

Chemical Analysis Report

SW-DIST-2019-02-20-01

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

Event Description: **Bishop Creek-Pinellas Sites 12-04, 12-02**

Request ID: **RQ-2019-02-18-16**

Customer: **SW-DIST**

Project ID: **SMP**

Send Reports to:

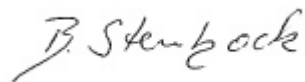
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Date Certified: 01-MAR-2019 17:15



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: Bishop Crk @ Oakcrest Dr.(PC 12-02)

Collection Date/Time: 02/19/2019 09:00

Field ID: G1SW0063

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2063937	EPA 8321B	2,4-D	0.039		ug/L	P359132	
		Acesulfame K**	0.11	I	ug/L	P358980	
		AMPA**	0.98		ug/L	P358980	
		Sucralose**	1.6		ug/L	P358980	
		Acetaminophen**	0.0080	U	ug/L	P359132	
		Endothall**	0.25	U	ug/L	P358980	
		Glufosinate**	0.10	U	ug/L	P358980	
		Bentazon	0.053		ug/L	P359132	
		Glyphosate**	2.1		ug/L	P358980	
		Carbamazepine**	0.0023	I	ug/L	P359132	
		Diuron	0.0065	I	ug/L	P359132	
		Fenuron	0.016	U	ug/L	P359132	
		Fluridone**	0.92		ug/L	P359132	
		Imazapyr**	1.1		ug/L	P359132	
		Hydrocodone**	0.0020	U	ug/L	P359132	
		Ibuprofen**	0.020	U	ug/L	P359132	
		Imidacloprid	0.011		ug/L	P359132	MS
		Linuron	0.0040	U	ug/L	P359132	
		MCPP	0.0025	I	ug/L	P359132	
		Naproxen**	0.0080	U	ug/L	P359132	
		Primidone**	0.0054	I	ug/L	P359132	
		Pyraclostrobin**	0.0020	U	ug/L	P359132	
		Triclopyr**	0.0040	U	ug/L	P359132	

Sample Location: Bishop Crk @ Harbor Lakes (PC 12-04)

Collection Date/Time: 02/19/2019 09:48

Field ID: G1SW0061

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2063938	EPA 8321B	2,4-D	0.0083		ug/L	P359230	
		Acesulfame K**	0.10	U	ug/L	P358980	
		AMPA**	0.49		ug/L	P358980	
		Sucralose**	0.13		ug/L	P358980	
		Acetaminophen**	0.0080	U	ug/L	P359230	
		Endothall**	0.25	U	ug/L	P358980	
		Glufosinate**	0.10	U	ug/L	P358980	
		Bentazon	0.072		ug/L	P359230	
		Glyphosate**	0.43		ug/L	P358980	
		Carbamazepine**	8.0E-04	U	ug/L	P359230	
		Diuron	0.0020	U	ug/L	P359230	
		Fenuron	0.016	U	ug/L	P359230	
		Fluridone**	0.046		ug/L	P359230	
		Imazapyr**	0.080		ug/L	P359230	
		Hydrocodone**	0.0020	U	ug/L	P359230	
		Ibuprofen**	0.020	U	ug/L	P359230	
		Imidacloprid	0.037		ug/L	P359230	MS
		Linuron	0.0040	U	ug/L	P359230	
		MCPP	0.0046	I	ug/L	P359230	
		Naproxen**	0.0080	U	ug/L	P359230	
		Primidone**	0.0040	U	ug/L	P359230	
		Pyraclostrobin**	0.0020	U	ug/L	P359230	
		Triclopyr**	0.0040	U	ug/L	P359230	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P358980

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: P359132

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	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
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P359230

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	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
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P358980

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	118		P	40 - 150
AMPA	87.8		P	40 - 150
Endothall	92.3		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	100		P	40 - 140
Sucralose	95.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P359132

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	78.2		P	40 - 150
Acetaminophen	95.1		P	30 - 150
Bentazon	115		P	30 - 150
Carbamazepine	92.2		P	40 - 150
Diuron	82.7		P	40 - 150
Fenuron	115		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	102		P	40 - 150
Ibuprofen	88.5		P	40 - 150
Imazapyr	102		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	74.2		P	40 - 150
MCPP	99.7		P	40 - 150
Naproxen	75.6		P	40 - 150
Primidone	104		P	40 - 150
Pyraclostrobin	69.0		P	40 - 150
Triclopyr	64.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P359230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	94.1		P	40 - 150
Acetaminophen	109		P	30 - 150
Bentazon	124		P	30 - 150
Carbamazepine	77.5		P	40 - 150
Diuron	88.5		P	40 - 150
Fenuron	118		P	40 - 150
Fluridone	113		P	40 - 150
Hydrocodone	94.1		P	40 - 150
Ibuprofen	102		P	40 - 150
Imazapyr	97.7		P	40 - 150
Imidacloprid	110		P	40 - 150
Linuron	86.0		P	40 - 150
MCPP	111		P	40 - 150
Naproxen	91.6		P	40 - 150
Primidone	102		P	40 - 150
Pyraclostrobin	61.2		P	40 - 150
Triclopyr	59.4		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P358980

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062987	Acesulfame K	86.1	86.3	P/P	40 - 150
2062987	AMPA	67.8	67.6	P/P	40 - 150
2062987	Endothall	94.2	94.2	P/P	40 - 150
2062987	Glufosinate	77.8	71.7	P/P	40 - 150
2062987	Glyphosate	83.1	77.8	P/P	40 - 140
2062987	Sucralose	98.0	96.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P359132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2063322	2,4-D	104	104	P/P	40 - 150
2063322	Acetaminophen	125	125	P/P	30 - 150
2063322	Bentazon	90.8	105	P/P	30 - 150
2063322	Carbamazepine	81.5	84.8	P/P	40 - 150
2063322	Diuron	69.4	81.9	P/P	40 - 150
2063322	Fenuron	88.7	86.9	P/P	40 - 150
2063322	Fluridone	113	122	P/P	40 - 150
2063322	Hydrocodone	100	117	P/P	40 - 150
2063322	Ibuprofen	86.0	73.8	P/P	40 - 150
2063322	Imazapyr	130	149	P/P	40 - 150
2063322	Imidacloprid	202	215	F/F	40 - 150
2063322	Linuron	72.5	82.3	P/P	40 - 150
2063322	MCP	130	140	P/P	40 - 150
2063322	Naproxen	87.2	87.2	P/P	40 - 150
2063322	Primidone	104	109	P/P	40 - 150
2063322	Pyraclostrobin	72.1	69.5	P/P	40 - 150
2063322	Triclopyr	85.8	86.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P359230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2064182	2,4-D	117	105	P/P	40 - 150
2064182	Acetaminophen	102	98.7	P/P	30 - 150
2064182	Bentazon	68.7	76.7	P/P	30 - 150
2064182	Carbamazepine	70.8	68.2	P/P	40 - 150
2064182	Diuron	63.8	68.7	P/P	40 - 150
2064182	Fenuron	71.2	71.5	P/P	40 - 150
2064182	Fluridone	92.0	111	P/P	40 - 150
2064182	Hydrocodone	78.2	76.9	P/P	40 - 150
2064182	Ibuprofen	91.8	85.3	P/P	40 - 150
2064182	Imazapyr	131	102	P/P	40 - 150
2064182	Imidacloprid	163	154	F/F	40 - 150
2064182	Linuron	72.0	76.1	P/P	40 - 150
2064182	MCP	141	139	P/P	40 - 150
2064182	Naproxen	87.0	77.9	P/P	40 - 150
2064182	Primidone	85.7	91.8	P/P	40 - 150
2064182	Pyraclostrobin	75.1	78.7	P/P	40 - 150
2064182	Triclopyr	88.1	80.1	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P358980

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062987	Acesulfame K	0.222	Spike	P	0 - 30
2062987	AMPA	0.353	Spike	P	0 - 30
2062987	Endothall	0.0242	Spike	P	0 - 30
2062987	Glufosinate	8.12	Spike	P	0 - 30
2062987	Glyphosate	5.80	Spike	P	0 - 30
2062987	Sucralose	1.44	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P359132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2063322	2,4-D	0.0714	Spike	P	0 - 30
2063322	Acetaminophen	0.329	Spike	P	0 - 30
2063322	Bentazon	9.96	Spike	P	0 - 30
2063322	Carbamazepine	3.92	Spike	P	0 - 30
2063322	Diuron	15.6	Spike	P	0 - 30
2063322	Fenuron	1.95	Spike	P	0 - 30
2063322	Fluridone	6.46	Spike	P	0 - 30
2063322	Hydrocodone	15.6	Spike	P	0 - 30
2063322	Ibuprofen	15.3	Spike	P	0 - 30
2063322	Imazapyr	8.26	Spike	P	0 - 30
2063322	Imidacloprid	5.85	Spike	P	0 - 30
2063322	Linuron	12.7	Spike	P	0 - 30
2063322	MCP	7.54	Spike	P	0 - 30
2063322	Naproxen	0.00172	Spike	P	0 - 30
2063322	Primidone	4.77	Spike	P	0 - 30
2063322	Pyraclostrobin	3.61	Spike	P	0 - 30
2063322	Triclopyr	0.627	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P359230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2064182	2,4-D	10.0	Spike	P	0 - 30
2064182	Acetaminophen	3.47	Spike	P	0 - 30
2064182	Bentazon	6.32	Spike	P	0 - 30
2064182	Carbamazepine	3.78	Spike	P	0 - 30
2064182	Diuron	6.89	Spike	P	0 - 30
2064182	Fenuron	0.448	Spike	P	0 - 30
2064182	Fluridone	16.8	Spike	P	0 - 30
2064182	Hydrocodone	1.73	Spike	P	0 - 30
2064182	Ibuprofen	7.38	Spike	P	0 - 30
2064182	Imazapyr	4.45	Spike	P	0 - 30
2064182	Imidacloprid	5.18	Spike	P	0 - 30
2064182	Linuron	5.47	Spike	P	0 - 30
2064182	MCP	1.88	Spike	P	0 - 30
2064182	Naproxen	11.1	Spike	P	0 - 30
2064182	Primidone	6.91	Spike	P	0 - 30
2064182	Pyraclostrobin	4.61	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P359230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2064182	Triclopyr	9.53	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 2063937
Field Sample ID: G1SW0063

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	122	P	30 - 160
EPA 8321B	Carbamazepine-d10	65.5	P	30 - 160
EPA 8321B	Diuron-d6	53.1	P	30 - 160
EPA 8321B	Endothall-d6	105	P	40 - 160
EPA 8321B	Endothall-d6	105	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	66.8	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	66.8	P	40 - 160
EPA 8321B	Ibuprofen-d3	79.6	P	30 - 160
EPA 8321B	Primidone-d5	90.7	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	40 - 160
EPA 8321B	Sucralose-d6	100	P	40 - 160

Lab Sample ID: 2063938
Field Sample ID: G1SW0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	117	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.6	P	30 - 160
EPA 8321B	Diuron-d6	57.6	P	30 - 160
EPA 8321B	Endothall-d6	107	P	40 - 160
EPA 8321B	Endothall-d6	107	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	65.8	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	65.8	P	40 - 160
EPA 8321B	Ibuprofen-d3	72.5	P	30 - 160
EPA 8321B	Primidone-d5	94.1	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	40 - 160
EPA 8321B	Sucralose-d6	105	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A89547

Included Lab Sample IDs: 2063937, 2063938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	78.1	79.3	P/P	60 - 160
Glufosinate	105	102	P/P	60 - 160
Glyphosate	101	99.1	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A89599

Included Lab Sample IDs: 2063937, 2063938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	99.4	101	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A89610

Included Lab Sample IDs: 2063937, 2063938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.3	99.2	P/P	50 - 150
2,4-D	95.5	92.3	P/P	50 - 150
Acetaminophen	107	117	P/P	60 - 160
Acetaminophen	113	107	P/P	60 - 160
Bentazon	69.6	77.3	P/P	50 - 160
Bentazon	79.2	69.6	P/P	50 - 160
Carbamazepine	98.8	99.8	P/P	60 - 150
Carbamazepine	99.8	99.7	P/P	60 - 150
Diuron	105	109	P/P	60 - 150
Diuron	109	101	P/P	60 - 150
Fenuron	105	98.9	P/P	60 - 150
Fenuron	98.9	101	P/P	60 - 150
Fluridone	100	103	P/P	60 - 160
Fluridone	103	106	P/P	60 - 160
Hydrocodone	96.3	98.0	P/P	60 - 150
Hydrocodone	98.0	92.7	P/P	60 - 150
Ibuprofen	78.2	62.2	P/P	50 - 160
Ibuprofen	79.9	78.2	P/P	50 - 160
Imazapyr	106	99.1	P/P	50 - 150
Imazapyr	93.1	118	P/P	50 - 150
Imidacloprid	103	108	P/P	60 - 150
Imidacloprid	95.4	103	P/P	60 - 150
Linuron	105	107	P/P	60 - 150
Linuron	107	105	P/P	60 - 150
MCP	102	97.6	P/P	50 - 150
MCP	104	102	P/P	50 - 150
Naproxen	116	66.4	P/P	50 - 160
Naproxen	66.4	136	P/P	50 - 160
Primidone	100	103	P/P	60 - 150
Primidone	103	102	P/P	60 - 150
Pyraclostrobin	99.2	104	P/P	60 - 150
Pyraclostrobin	99.3	99.2	P/P	60 - 150
Triclopyr	102	98.6	P/P	50 - 150
Triclopyr	107	102	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A89676

Included Lab Sample IDs: 2063937, 2063938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	118	116	P/P	60 - 160
Endothall	94.2	96.3	P/P	60 - 160

* 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 LCS	SMP	MS
EPA 8321B	2,4-D	78.2	104	104			0.0714
	2,4-D	94.1	117	105			10.0
	Acesulfame K	118	86.1	86.3			0.222
	Acetaminophen	95.1	125	125			0.329
	Acetaminophen	109	102	98.7			3.47
	AMPA	87.8	67.8	67.6			0.353
	Bentazon	115	90.8	105			9.96
	Bentazon	124	68.7	76.7			6.32
	Carbamazepine	92.2	81.5	84.8			3.92
	Carbamazepine	77.5	70.8	68.2			3.78
	Diuron	82.7	69.4	81.9			15.6
	Diuron	88.5	63.8	68.7			6.89
	Endothall	92.3	94.2	94.2			0.0242
	Fenuron	115	88.7	86.9			1.95
	Fenuron	118	71.2	71.5			0.448
	Fluridone	102	113	122			6.46
	Fluridone	113	92.0	111			16.8
	Glufosinate	105	77.8	71.7			8.12
	Glyphosate	100	83.1	77.8			5.80
	Hydrocodone	102	100	117			15.6
	Hydrocodone	94.1	78.2	76.9			1.73
	Ibuprofen	88.5	86.0	73.8			15.3
	Ibuprofen	102	91.8	85.3			7.38
	Imazapyr	102	130	149			8.26
	Imazapyr	97.7	131	102			4.45
	Imidacloprid	103	202	215			5.85
	Imidacloprid	110	163	154			5.18
	Linuron	74.2	72.5	82.3			12.7
	Linuron	86.0	72.0	76.1			5.47
	MCPP	99.7	130	140			7.54
	MCPP	111	141	139			1.88
	Naproxen	75.6	87.2	87.2			0.0017
	Naproxen	91.6	87.0	77.9			11.1
	Primidone	104	104	109			4.77
	Primidone	102	85.7	91.8			6.91
	Pyraclostrobin	69.0	72.1	69.5			3.61
	Pyraclostrobin	61.2	75.1	78.7			4.61
	Sucralose	95.4	98.0	96.5			1.44
	Triclopyr	64.2	85.8	86.3			0.627
	Triclopyr	59.4	88.1	80.1			9.53

Reference Method Descriptions

Method / DoH Cert #
EPA 8321B / E31780
EPA 8321B / E31780

Description
Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
Water soluble organic compounds by HPLC/MS/MS

Associated Samples
2063937, 2063938
2063937, 2063938

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	02/20/2019	02/20/2019 13:00	Rebecca Ware	02/20/2019 15:46	Mohammad Ghaffari	2063937
	02/20/2019	02/20/2019 13:00	Rebecca Ware	02/20/2019 15:57	Mohammad Ghaffari	2063938
	02/20/2019	02/20/2019 13:00	Rebecca Ware	02/21/2019 00:20	Rebecca Ware	2063937
	02/20/2019	02/20/2019 13:00	Rebecca Ware	02/21/2019 00:34	Rebecca Ware	2063938
	02/20/2019	02/20/2019 13:00	Rebecca Ware	02/22/2019 23:51	Mohammad Ghaffari	2063937
	02/20/2019	02/20/2019 13:00	Rebecca Ware	02/23/2019 00:03	Mohammad Ghaffari	2063938
	02/20/2019	02/21/2019 10:00	Hoor Shaik	02/24/2019 22:29	Juyoung Kim	2063937
	02/20/2019	02/21/2019 10:00	Hoor Shaik	02/25/2019 14:38	Juyoung Kim	2063937
	02/20/2019	02/22/2019 10:00	Hoor Shaik	02/25/2019 02:32	Juyoung Kim	2063938