

Chemical Analysis Report

NW-DIST-2018-03-28-02

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

Event Description: **Perdido/Chico Run**
Request ID: **RQ-2018-03-26-18**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 12-APR-2018 10:39

A handwritten signature in black ink, appearing to read "Liang Lin", 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 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 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: PERDIDO BAY 500M SE OF MOUTH
ELEVENMILE**

Collection Date/Time: 03/27/2018 12:00

Field ID: G5NW0128

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1978726	EPA 8321B	2,4-D	0.0083		ug/L	P342346	
		Sucralose**	1.2		ug/L	P342468	
		Bentazon	8.0E-04	U	ug/L	P342346	
		MCP	0.0020	U	ug/L	P342346	
		Triclopyr**	0.0040	U	ug/L	P342346	
		Imidacloprid	0.0036	I	ug/L	P342346	MS
		Diuron	0.0092		ug/L	P342346	
		Pyraclostrobin**	0.0020	U	ug/L	P342346	
		Primidone**	0.0053	I	ug/L	P342346	
		Linuron	0.0040	U	ug/L	P342346	
		Acetaminophen**	0.0080	U	ug/L	P342346	
		Fenuron	0.016	U	ug/L	P342346	
		Imazapyr**	0.0040	U	ug/L	P342346	
		Carbamazepine**	0.0022		ug/L	P342346	
		Fluridone**	8.0E-04	U	ug/L	P342346	

Sample Location: PERDIDO BAY NW OF MILLVIEW

Collection Date/Time: 03/27/2018 12:15

Field ID: G5NW0022

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1978727	EPA 8321B	2,4-D	0.0090		ug/L	P342408	
		Sucralose**	1.2		ug/L	P342468	
		Bentazon	8.0E-04	U	ug/L	P342408	
		MCP	0.0020	U	ug/L	P342408	
		Triclopyr**	0.0040	U	ug/L	P342408	
		Imidacloprid	0.0020	U	ug/L	P342408	
		Diuron	0.0069	I	ug/L	P342408	
		Pyraclostrobin**	0.0020	U	ug/L	P342408	
		Primidone**	0.0055	I	ug/L	P342408	
		Linuron	0.0040	U	ug/L	P342408	
		Acetaminophen**	0.0080	U	ug/L	P342408	
		Fenuron	0.016	U	ug/L	P342408	
		Imazapyr**	0.0040	U	ug/L	P342408	
		Carbamazepine**	0.0020		ug/L	P342408	
		Fluridone**	8.0E-04	U	ug/L	P342408	

Sample Location: PERDIDO BAY OFF DOUBLE POINT

Collection Date/Time: 03/27/2018 12:30

Field ID: G5NW0127

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1978728	EPA 8321B	2,4-D	0.0034	I	ug/L	P342408	
		Sucralose**	0.65		ug/L	P342468	
		Bentazon	8.0E-04	U	ug/L	P342408	
		MCP	0.0020	U	ug/L	P342408	

Field ID: G5NW0127

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1978728	EPA 8321B	Triclopyr**	0.0040	U	ug/L	P342408	
		Imidacloprid	0.0020	U	ug/L	P342408	
		Diuron	0.0049	I	ug/L	P342408	
		Pyraclostrobin**	0.0020	U	ug/L	P342408	
		Primidone**	0.0040	U	ug/L	P342408	
		Linuron	0.0040	U	ug/L	P342408	
		Acetaminophen**	0.0080	U	ug/L	P342408	
		Fenuron	0.016	U	ug/L	P342408	
		Imazapyr**	0.0040	U	ug/L	P342408	
		Carbamazepine**	0.0013	I	ug/L	P342408	
		Fluridone**	8.0E-04	U	ug/L	P342408	

Sample Location: BRIDGE CREEK (TIDAL PORTION)

Collection Date/Time: 03/27/2018 12:45

Field ID: G5NW0129

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1978729	EPA 8321B	2,4-D	0.0035	I	ug/L	P342408	
		Sucralose**	0.77		ug/L	P342468	
		Bentazon	8.0E-04	U	ug/L	P342408	
		MCP	0.0020	U	ug/L	P342408	
		Triclopyr**	0.0040	U	ug/L	P342408	
		Imidacloprid	0.014		ug/L	P342408	
		Diuron	0.0029	I	ug/L	P342408	
		Pyraclostrobin**	0.0020	U	ug/L	P342408	
		Primidone**	0.0041	I	ug/L	P342408	
		Linuron	0.0040	U	ug/L	P342408	
		Acetaminophen**	0.0080	U	ug/L	P342408	
		Fenuron	0.016	U	ug/L	P342408	
		Imazapyr**	0.0040	U	ug/L	P342408	
		Carbamazepine**	0.0016	I	ug/L	P342408	
		Fluridone**	8.0E-04	U	ug/L	P342408	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P342346

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	4.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P342346

Component	Result	Code	Units
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclorobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P342408

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	4.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclorobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P342468

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P342346

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	78.9		P	40 - 150
Acetaminophen	112		P	30 - 150
Bentazon	74.4		P	30 - 150
Carbamazepine	75.8		P	40 - 150
Diuron	68.2		P	40 - 150
Fenuron	111		P	40 - 150
Fluridone	60.0		P	40 - 150
Imazapyr	69.0		P	40 - 150
Imidacloprid	93.9		P	40 - 160
Linuron	80.2		P	40 - 150
MCP	74.3		P	40 - 150
Primidone	115		P	40 - 150
Pyraclorobin	68.3		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P342346

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	79.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P342408

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	60.6		P	40 - 150
Acetaminophen	104		P	30 - 150
Bentazon	66.5		P	30 - 150
Carbamazepine	72.6		P	40 - 150
Diuron	63.1		P	40 - 150
Fenuron	107		P	40 - 150
Fluridone	56.1		P	40 - 150
Imazapyr	67.4		P	40 - 150
Imidacloprid	93.7		P	40 - 160
Linuron	75.5		P	40 - 150
MCP	51.7		P	40 - 150
Primidone	108		P	40 - 150
Pyraclostrobin	75.0		P	40 - 150
Triclopyr	50.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P342468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	95.4		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P342346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1978254	2,4-D	114	130	P/P	40 - 150
1978254	Acetaminophen	126	126	P/P	30 - 150
1978254	Bentazon	48.5	53.2	P/P	30 - 150
1978254	Carbamazepine	101	96.7	P/P	40 - 150
1978254	Diuron	82.4	82.5	P/P	40 - 150
1978254	Fenuron	106	106	P/P	40 - 150
1978254	Fluridone	65.7	62.4	P/P	40 - 150
1978254	Imazapyr	73.6	63.9	P/P	40 - 150
1978254	Imidacloprid	164	162	F/F	40 - 160
1978254	Linuron	87.6	85.6	P/P	40 - 150
1978254	MCP	95.0	103	P/P	40 - 150
1978254	Primidone	118	121	P/P	40 - 150
1978254	Pyraclostrobin	83.1	75.5	P/P	40 - 150
1978254	Triclopyr	97.7	108	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P342408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1978945	2,4-D	50.1	48.4	P/P	40 - 150
1978945	Acetaminophen	120	121	P/P	30 - 150
1978945	Bentazon	51.1	50.5	P/P	30 - 150
1978945	Carbamazepine	83.0	84.3	P/P	40 - 150
1978945	Diuron	65.4	63.9	P/P	40 - 150
1978945	Fenuron	96.0	87.5	P/P	40 - 150
1978945	Fluridone	53.5	63.3	P/P	40 - 150
1978945	Imazapyr	63.2	61.3	P/P	40 - 150
1978945	Imidacloprid	134	138	P/P	40 - 160
1978945	Linuron	78.4	79.9	P/P	40 - 150
1978945	MCP	54.0	47.4	P/P	40 - 150
1978945	Primidone	122	109	P/P	40 - 150
1978945	Pyraclostrobin	80.8	72.9	P/P	40 - 150
1978945	Triclopyr	55.3	51.7	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P342468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1978560	Sucralose	97.8	128	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P342346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1978254	2,4-D	13.0	Spike	P	0 - 30
1978254	Acetaminophen	0.0791	Spike	P	0 - 30
1978254	Bentazon	9.20	Spike	P	0 - 30
1978254	Carbamazepine	4.68	Spike	P	0 - 30
1978254	Diuron	0.0243	Spike	P	0 - 30
1978254	Fenuron	0.189	Spike	P	0 - 30
1978254	Fluridone	5.21	Spike	P	0 - 30
1978254	Imazapyr	10.7	Spike	P	0 - 30
1978254	Imidacloprid	0.983	Spike	P	0 - 30
1978254	Linuron	2.25	Spike	P	0 - 30
1978254	MCP	8.17	Spike	P	0 - 30
1978254	Primidone	1.92	Spike	P	0 - 30
1978254	Pyraclostrobin	9.50	Spike	P	0 - 30
1978254	Triclopyr	10.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P342408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1978945	2,4-D	3.36	Spike	P	0 - 30
1978945	Acetaminophen	0.963	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P342408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1978945	Bentazon	0.864	Spike	P	0 - 30
1978945	Carbamazepine	1.60	Spike	P	0 - 30
1978945	Diuron	2.40	Spike	P	0 - 30
1978945	Fenuron	9.27	Spike	P	0 - 30
1978945	Fluridone	16.4	Spike	P	0 - 30
1978945	Imazapyr	1.88	Spike	P	0 - 30
1978945	Imidacloprid	2.47	Spike	P	0 - 30
1978945	Linuron	1.94	Spike	P	0 - 30
1978945	MCPP	13.1	Spike	P	0 - 30
1978945	Primidone	11.6	Spike	P	0 - 30
1978945	Pyraclostrobin	10.3	Spike	P	0 - 30
1978945	Triclopyr	6.63	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P342468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1978560	Sucralose	23.9	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: 1978726
 Field Sample ID: G5NW0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	137	P	30 - 160
EPA 8321B	Carbamazepine-d10	112	P	30 - 160
EPA 8321B	Diuron-d6	97.0	P	30 - 160
EPA 8321B	Primidone-d5	120	P	30 - 160
EPA 8321B	Sucralose-d6	94.7	P	40 - 160

Lab Sample ID: 1978727
 Field Sample ID: G5NW0022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	44.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	128	P	30 - 160
EPA 8321B	Carbamazepine-d10	82.0	P	30 - 160
EPA 8321B	Diuron-d6	73.9	P	30 - 160
EPA 8321B	Primidone-d5	132	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1978728
Field Sample ID: G5NW0127

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	33.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	136	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.0	P	30 - 160
EPA 8321B	Diuron-d6	75.6	P	30 - 160
EPA 8321B	Primidone-d5	95.2	P	30 - 160
EPA 8321B	Sucralose-d6	80.6	P	40 - 160

Lab Sample ID: 1978729
Field Sample ID: G5NW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	39.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	146	P	30 - 160
EPA 8321B	Carbamazepine-d10	82.8	P	30 - 160
EPA 8321B	Diuron-d6	76.5	P	30 - 160
EPA 8321B	Primidone-d5	131	P	30 - 160
EPA 8321B	Sucralose-d6	97.8	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A82969
Included Lab Sample IDs: 1978726

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	86.3	83.3	P/P	50 - 150
Acetaminophen	104	105	P/P	60 - 150
Bentazon	82.0	86.1	P/P	50 - 150
Carbamazepine	108	111	P/P	60 - 150
Diuron	122	131	P/P	60 - 150
Fenuron	108	113	P/P	60 - 150
Fluridone	109	108	P/P	60 - 160
Imazapyr	80.0	89.3	P/P	50 - 150
Imidacloprid	111	115	P/P	60 - 150
Linuron	118	119	P/P	60 - 150
MCP	89.6	90.1	P/P	50 - 150
Primidone	113	98.2	P/P	60 - 150
Pyraclorobin	122	120	P/P	60 - 150
Triclopyr	93.1	81.3	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A83032
Included Lab Sample IDs: 1978726, 1978727, 1978728, 1978729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	109	92.9	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A83110

Included Lab Sample IDs: 1978727, 1978728, 1978729

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.7	92.9	P/P	50 - 150
Acetaminophen	106	111	P/P	60 - 150
Acetaminophen	112	106	P/P	60 - 150
Bentazon	99.8	95.1	P/P	50 - 150
Carbamazepine	106	107	P/P	60 - 150
Carbamazepine	107	107	P/P	60 - 150
Diuron	105	111	P/P	60 - 150
Diuron	119	105	P/P	60 - 150
Fenuron	106	106	P/P	60 - 150
Fenuron	106	109	P/P	60 - 150
Fluridone	113	116	P/P	60 - 160
Fluridone	118	113	P/P	60 - 160
Imazapyr	91.2	87.5	P/P	50 - 150
Imazapyr	93.2	91.2	P/P	50 - 150
Imidacloprid	106	112	P/P	60 - 150
Imidacloprid	112	112	P/P	60 - 150
Linuron	118	122	P/P	60 - 150
Linuron	121	118	P/P	60 - 150
MCPP	90.7	95.7	P/P	50 - 150
Primidone	102	121	P/P	60 - 150
Primidone	96.5	102	P/P	60 - 150
Pyraclostrobin	114	118	P/P	60 - 150
Pyraclostrobin	119	114	P/P	60 - 150
Triclopyr	90.5	83.3	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	LCS	Precision SMP	MS
EPA 8321B	2,4-D	78.9	114	130		13.0
	2,4-D	60.6	50.1	48.4		3.36
	Acetaminophen	112	126	126		0.0791
	Acetaminophen	104	120	121		0.963
	Bentazon	74.4	48.5	53.2		9.20
	Bentazon	66.5	51.1	50.5		0.864
	Carbamazepine	75.8	101	96.7		4.68
	Carbamazepine	72.6	83.0	84.3		1.60
	Diuron	68.2	82.4	82.5		0.0243
	Diuron	63.1	65.4	63.9		2.40
	Fenuron	111	106	106		0.189
	Fenuron	107	96.0	87.5		9.27
	Fluridone	60.0	65.7	62.4		5.21
	Fluridone	56.1	53.5	63.3		16.4
	Imazapyr	69.0	73.6	63.9		10.7
	Imazapyr	67.4	61.3	63.2		1.88

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Imidacloprid	93.9	164	162		0.983
	Imidacloprid	93.7	134	138		2.47
	Linuron	80.2	87.6	85.6		2.25
	Linuron	75.5	78.4	79.9		1.94
	MCP	74.3	95.0	103		8.17
	MCP	51.7	54.0	47.4		13.1
	Primidone	115	118	121		1.92
	Primidone	108	122	109		11.6
	Pyraclostrobin	68.3	83.1	75.5		9.50
	Pyraclostrobin	75.0	80.8	72.9		10.3
	Sucralose	95.4	97.8	128		23.9
	Triclopyr	79.2	97.7	108		10.2
	Triclopyr	50.4	55.3	51.7		6.63

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

1978726, 1978727, 1978728, 1978729

1978726, 1978727, 1978728, 1978729

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/28/2018	03/29/2018	Hoor Shaik	03/30/2018	Julie Michelle Frank	1978726
	03/28/2018	03/29/2018	Hoor Shaik	03/31/2018	Julie Michelle Frank	1978726
	03/28/2018	03/30/2018	Julie Michelle Frank	03/30/2018	Mohammad Ghaffari	1978726, 1978727, 1978728, 1978729
	03/28/2018	04/02/2018	Hoor Shaik	04/04/2018	Julie Michelle Frank	1978727, 1978728, 1978729