

Chemical Analysis Report

TLH-ROC-2019-05-01-02

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

Event Description: **Lexington Creek**
Request ID: **RQ-2019-04-29-39**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 10-MAY-2019 10:51



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: Lexington Creek @ Timberlake Rd

Collection Date/Time: 05/01/2019 09:00

Field ID: G1TLHR0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082303	EPA 8321B	2,4-D	0.0020	U	ug/L	P363161	
		Acesulfame K**	0.10	U	ug/L	P363198	
		AMPA**	0.18	I	ug/L	P363198	
		Sucralose**	0.25		ug/L	P363198	
		Acetaminophen**	0.012	I	ug/L	P363161	
		Endothall**	0.25	U	ug/L	P363198	
		Glufosinate**	0.10	U	ug/L	P363198	
		Bentazon	0.0018	I	ug/L	P363161	
		Glyphosate**	0.10	U	ug/L	P363198	
		Carbamazepine**	8.0E-04	U	ug/L	P363161	
		Diuron	0.0020	U	ug/L	P363161	
		Fenuron	0.016	U	ug/L	P363161	
		Fluridone**	0.0029	I	ug/L	P363161	
		Imazapyr**	0.0040	U	ug/L	P363161	
		Hydrocodone**	0.0020	U	ug/L	P363161	
		Ibuprofen**	0.020	U	ug/L	P363161	
		Imidacloprid	0.061		ug/L	P363161	MS
		Linuron	0.0040	U	ug/L	P363161	
		MCPP	0.0020	U	ug/L	P363161	
		Naproxen**	0.0080	U	ug/L	P363161	
		Primidone**	0.0040	U	ug/L	P363161	
		Pyraclostrobin**	0.0020	U	ug/L	P363161	
		Triclopyr**	0.0040	U	ug/L	P363161	

Sample Location: Unnamed Branch @ John Hancock Dr.

Collection Date/Time: 05/01/2019 09:10

Field ID: G1TLHR0105

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082304	EPA 8321B	2,4-D	0.0020	U	ug/L	P363161	
		Acesulfame K**	0.10	U	ug/L	P363198	
		AMPA**	0.10	U	ug/L	P363198	
		Sucralose**	0.12		ug/L	P363198	
		Acetaminophen**	0.0080	U	ug/L	P363161	
		Endothall**	0.25	U	ug/L	P363198	
		Glufosinate**	0.10	U	ug/L	P363198	
		Bentazon	0.0097		ug/L	P363161	
		Glyphosate**	0.10	U	ug/L	P363198	
		Carbamazepine**	8.0E-04	U	ug/L	P363161	
		Diuron	0.0020	U	ug/L	P363161	
		Fenuron	0.016	U	ug/L	P363161	
		Fluridone**	0.045		ug/L	P363161	
		Imazapyr**	0.0040	U	ug/L	P363161	
		Hydrocodone**	0.0020	U	ug/L	P363161	
		Ibuprofen**	0.020	U	ug/L	P363161	
		Imidacloprid	0.22		ug/L	P363161	MS
		Linuron	0.0040	U	ug/L	P363161	
		MCPP	0.0020	U	ug/L	P363161	
		Naproxen**	0.0080	U	ug/L	P363161	
		Primidone**	0.0040	U	ug/L	P363161	
		Pyraclostrobin**	0.0020	U	ug/L	P363161	
		Triclopyr**	0.0040	U	ug/L	P363161	

Sample Location: Lexington Creek @ Donation Staton

Collection Date/Time: 05/01/2019 09:25

Field ID: G1TLHR0106

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082305	EPA 8321B	2,4-D	0.0020	U	ug/L	P363161	
		Acesulfame K**	0.10	U	ug/L	P363198	
		AMPA**	0.18	I	ug/L	P363198	
		Sucralose**	0.22		ug/L	P363198	
		Acetaminophen**	0.0080	U	ug/L	P363161	
		Endothall**	0.25	U	ug/L	P363198	
		Glufosinate**	0.10	U	ug/L	P363198	
		Bentazon	0.0015	I	ug/L	P363161	
		Glyphosate**	0.10	U	ug/L	P363198	
		Carbamazepine**	8.0E-04	U	ug/L	P363161	
		Diuron	0.0020	U	ug/L	P363161	
		Fenuron	0.016	U	ug/L	P363161	
		Fluridone**	0.0022	I	ug/L	P363161	
		Imazapyr**	0.0040	U	ug/L	P363161	
		Hydrocodone**	0.0020	U	ug/L	P363161	
		Ibuprofen**	0.020	U	ug/L	P363161	
		Imidacloprid	0.075		ug/L	P363161	MS
		Linuron	0.0040	U	ug/L	P363161	
		MCP	0.0020	U	ug/L	P363161	
		Naproxen**	0.0080	U	ug/L	P363161	
		Primidone**	0.0040	U	ug/L	P363161	
		Pyraclostrobin**	0.0020	U	ug/L	P363161	
		Triclopyr**	0.0040	U	ug/L	P363161	

Sample Location: Lexington Creek @ Powerline

Collection Date/Time: 05/01/2019 09:40

Field ID: G1TLHR0107

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082306	EPA 8321B	2,4-D	0.0020	U	ug/L	P363161	
		Acesulfame K**	0.10	U	ug/L	P363198	
		AMPA**	0.17	I	ug/L	P363198	
		Sucralose**	0.086		ug/L	P363198	
		Acetaminophen**	0.0080	U	ug/L	P363161	
		Endothall**	0.25	U	ug/L	P363198	
		Glufosinate**	0.10	U	ug/L	P363198	
		Bentazon	0.0016	I	ug/L	P363161	
		Glyphosate**	0.10	U	ug/L	P363198	
		Carbamazepine**	8.0E-04	U	ug/L	P363161	
		Diuron	0.0020	U	ug/L	P363161	
		Fenuron	0.016	U	ug/L	P363161	
		Fluridone**	8.0E-04	U	ug/L	P363161	
		Imazapyr**	0.0040	U	ug/L	P363161	
		Hydrocodone**	0.0020	U	ug/L	P363161	
		Ibuprofen**	0.020	U	ug/L	P363161	
		Imidacloprid	0.15		ug/L	P363161	MS
		Linuron	0.0040	U	ug/L	P363161	
		MCPP	0.0020	U	ug/L	P363161	
		Naproxen**	0.0080	U	ug/L	P363161	
		Primidone**	0.0040	U	ug/L	P363161	
		Pyraclostrobin**	0.0020	U	ug/L	P363161	
		Triclopyr**	0.0040	U	ug/L	P363161	

Sample Location: Unnamed Branch @ Lakeshore Dr.

Collection Date/Time: 05/01/2019 10:25

Field ID: G1TLHR0108

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082307	EPA 8321B	2,4-D	0.0020	U	ug/L	P363161	
		Acesulfame K**	0.17	I	ug/L	P363198	
		AMPA**	0.10	U	ug/L	P363198	
		Sucralose**	1.6		ug/L	P363198	
		Acetaminophen**	0.0080	U	ug/L	P363161	
		Endothall**	0.25	U	ug/L	P363198	
		Glufosinate**	0.10	U	ug/L	P363198	
		Bentazon	8.0E-04	U	ug/L	P363161	
		Glyphosate**	0.10	U	ug/L	P363198	
		Carbamazepine**	0.0042		ug/L	P363161	
		Diuron	0.0020	U	ug/L	P363161	
		Fenuron	0.016	U	ug/L	P363161	
		Fluridone**	8.0E-04	U	ug/L	P363161	
		Imazapyr**	0.0040	U	ug/L	P363161	
		Hydrocodone**	0.0020	U	ug/L	P363161	
		Ibuprofen**	0.020	U	ug/L	P363161	
		Imidacloprid	0.013		ug/L	P363161	MS
		Linuron	0.0040	U	ug/L	P363161	
		MCPP	0.0020	U	ug/L	P363161	
		Naproxen**	0.0080	U	ug/L	P363161	
		Primidone**	0.0040	U	ug/L	P363161	
		Pyraclostrobin**	0.0020	U	ug/L	P363161	
		Triclopyr**	0.0040	U	ug/L	P363161	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P363161

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: P363198

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P363161

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	70.7		P	40 - 150
Acetaminophen	91.0		P	30 - 150
Bentazon	95.4		P	30 - 150
Carbamazepine	83.3		P	40 - 150
Diuron	89.7		P	40 - 150
Fenuron	112		P	40 - 150
Fluridone	141		P	40 - 150
Hydrocodone	97.4		P	40 - 150
Ibuprofen	74.6		P	40 - 150
Imazapyr	97.2		P	40 - 150
Imidacloprid	97.3		P	40 - 150
Linuron	106		P	40 - 150
MCPP	74.5		P	40 - 150
Naproxen	58.3		P	40 - 150
Primidone	75.8		P	40 - 150
Pyraclostrobin	72.7		P	40 - 150
Triclopyr	42.2		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P363198

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	71.4		P	40 - 150
AMPA	105		P	40 - 150
Endothall	69.4		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	92.4		P	40 - 140
Sucralose	104		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P363161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2081894	2,4-D	73.2	68.8	P/P	40 - 150
2081894	Acetaminophen	82.9	84.0	P/P	30 - 150
2081894	Bentazon	51.7	50.3	P/P	30 - 150
2081894	Carbamazepine	93.7	88.8	P/P	40 - 150
2081894	Diuron	76.2	68.2	P/P	40 - 150
2081894	Fenuron	105	112	P/P	40 - 150
2081894	Fluridone	139	143	P/P	40 - 150
2081894	Hydrocodone	94.5	91.4	P/P	40 - 150
2081894	Ibuprofen	71.8	72.5	P/P	40 - 150
2081894	Imazapyr	70.7	69.7	P/P	40 - 150
2081894	Imidacloprid	158	152	F/F	40 - 150
2081894	Linuron	101	109	P/P	40 - 150
2081894	MCPP	102	101	P/P	40 - 150
2081894	Naproxen	65.2	51.4	P/P	40 - 150
2081894	Primidone	75.5	68.6	P/P	40 - 150
2081894	Pyraclostrobin	79.6	72.2	P/P	40 - 150
2081894	Triclopyr	62.4	65.8	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P363198

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082110	Acesulfame K	77.1	77.2	P/P	40 - 150
2082110	AMPA	52.6	60.5	P/P	40 - 150
2082110	Endothall	63.6	63.9	P/P	40 - 150
2082110	Glufosinate	90.3	98.8	P/P	40 - 150
2082110	Glyphosate	82.7	91.8	P/P	40 - 140
2082110	Sucralose	104	110	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P363161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2081894	2,4-D	6.21	Spike	P	0 - 30
2081894	Acetaminophen	1.33	Spike	P	0 - 30
2081894	Bentazon	2.86	Spike	P	0 - 30
2081894	Carbamazepine	5.37	Spike	P	0 - 30
2081894	Diuron	11.2	Spike	P	0 - 30
2081894	Fenuron	6.34	Spike	P	0 - 30
2081894	Fluridone	2.53	Spike	P	0 - 30
2081894	Hydrocodone	3.30	Spike	P	0 - 30
2081894	Ibuprofen	0.918	Spike	P	0 - 30
2081894	Imazapyr	1.14	Spike	P	0 - 30
2081894	Imidacloprid	4.27	Spike	P	0 - 30
2081894	Linuron	7.66	Spike	P	0 - 30
2081894	MCPP	1.39	Spike	P	0 - 30
2081894	Naproxen	23.7	Spike	P	0 - 30
2081894	Primidone	9.54	Spike	P	0 - 30
2081894	Pyraclostrobin	9.76	Spike	P	0 - 30
2081894	Triclopyr	5.28	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P363198

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082110	Acesulfame K	0.106	Spike	P	0 - 30
2082110	AMPA	4.37	Spike	P	0 - 30
2082110	Endothall	0.550	Spike	P	0 - 30
2082110	Glufosinate	8.91	Spike	P	0 - 30
2082110	Glyphosate	3.77	Spike	P	0 - 30
2082110	Sucralose	5.30	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: 2082303
Field Sample ID: G1TLHR0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	88.2	P	30 - 160
EPA 8321B	Diuron-d6	99.8	P	30 - 160
EPA 8321B	Endothall-d6	83.6	P	30 - 160
EPA 8321B	Endothall-d6	83.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.1	P	30 - 160
EPA 8321B	Primidone-d5	119	P	30 - 160
EPA 8321B	Sucralose-d6	129	P	30 - 160
EPA 8321B	Sucralose-d6	129	P	30 - 160

Lab Sample ID: 2082304
Field Sample ID: G1TLHR0105

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	86.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.5	P	30 - 160
EPA 8321B	Diuron-d6	87.4	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.0	P	30 - 160
EPA 8321B	Primidone-d5	73.7	P	30 - 160
EPA 8321B	Sucralose-d6	130	P	30 - 160
EPA 8321B	Sucralose-d6	130	P	30 - 160

Lab Sample ID: 2082305
Field Sample ID: G1TLHR0106

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.4	P	30 - 160
EPA 8321B	Diuron-d6	86.6	P	30 - 160
EPA 8321B	Endothall-d6	73.9	P	30 - 160
EPA 8321B	Endothall-d6	73.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.5	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	129	P	30 - 160
EPA 8321B	Sucralose-d6	129	P	30 - 160

Lab Sample ID: 2082306
Field Sample ID: G1TLHR0107

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	73.7	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2082306
Field Sample ID: G1TLHR0107

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	114	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.3	P	30 - 160
EPA 8321B	Diuron-d6	90.8	P	30 - 160
EPA 8321B	Endothall-d6	87.8	P	30 - 160
EPA 8321B	Endothall-d6	87.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.9	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	130	P	30 - 160
EPA 8321B	Sucralose-d6	130	P	30 - 160

Lab Sample ID: 2082307
Field Sample ID: G1TLHR0108

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	70.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.8	P	30 - 160
EPA 8321B	Diuron-d6	65.4	P	30 - 160
EPA 8321B	Endothall-d6	74.7	P	30 - 160
EPA 8321B	Endothall-d6	74.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	72.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	72.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	58.4	P	30 - 160
EPA 8321B	Primidone-d5	87.5	P	30 - 160
EPA 8321B	Sucralose-d6	131	P	30 - 160
EPA 8321B	Sucralose-d6	131	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A91264

Included Lab Sample IDs: 2082303, 2082304, 2082305, 2082306, 2082307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	83.7	90.1	P/P	60 - 160
Acesulfame K	90.1	88.7	P/P	60 - 160
Endothall	65.7	68.8	P/P	60 - 160
Endothall	68.8	67.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A91267

Included Lab Sample IDs: 2082303, 2082304, 2082305, 2082306, 2082307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	108	P/P	60 - 160
Glufosinate	103	101	P/P	60 - 160
Glyphosate	109	108	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A91289

Included Lab Sample IDs: 2082303, 2082304, 2082305, 2082306, 2082307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	80.6	79.6	P/P	50 - 150
2,4-D	99.5	80.6	P/P	50 - 150
Acetaminophen	110	109	P/P	60 - 160
Acetaminophen	129	110	P/P	60 - 160
Bentazon	110	101	P/P	50 - 160
Bentazon	116	110	P/P	50 - 160
Carbamazepine	110	110	P/P	60 - 150
Carbamazepine	110	110	P/P	60 - 150
Diuron	112	92.1	P/P	60 - 150
Diuron	92.1	113	P/P	60 - 150
Fenuron	100	106	P/P	60 - 150
Fenuron	106	116	P/P	60 - 150
Fluridone	102	94.2	P/P	60 - 160
Fluridone	116	102	P/P	60 - 160
Hydrocodone	104	105	P/P	60 - 150
Hydrocodone	80.2	104	P/P	60 - 150
Ibuprofen	107	107	P/P	50 - 160
Ibuprofen	124	107	P/P	50 - 160
Imazapyr	90.8	90.5	P/P	50 - 150
Imazapyr	91.2	90.8	P/P	50 - 150
Imidacloprid	83.5	101	P/P	60 - 150
Imidacloprid	94.5	83.5	P/P	60 - 150
Linuron	127	144	P/P	60 - 150
Linuron	129	127	P/P	60 - 150
MCPP	98.9	99.7	P/P	50 - 150
MCPP	99.7	98.3	P/P	50 - 150
Naproxen	100	73.0	P/P	50 - 160
Naproxen	91.2	100	P/P	50 - 160
Primidone	101	93.2	P/P	60 - 150
Primidone	93.2	107	P/P	60 - 150
Pyraclostrobin	105	108	P/P	60 - 150
Pyraclostrobin	108	109	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A91289

Included Lab Sample IDs: 2082303, 2082304, 2082305, 2082306, 2082307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	106	111	P/P	50 - 150
Triclopyr	112	106	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A91293

Included Lab Sample IDs: 2082303, 2082304, 2082305, 2082306, 2082307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	105	107	P/P	60 - 160
Sucralose	99.3	105	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	70.7	73.2	68.8			6.21
	Acesulfame K	71.4	77.1	77.2			0.106
	Acetaminophen	91.0	82.9	84.0			1.33
	AMPA	105	52.6	60.5			4.37
	Bentazon	95.4	51.7	50.3			2.86
	Carbamazepine	83.3	93.7	88.8			5.37
	Diuron	89.7	76.2	68.2			11.2
	Endothall	69.4	63.6	63.9			0.550
	Fenuron	112	105	112			6.34
	Fluridone	141	139	143			2.53
	Glufosinate	100	90.3	98.8			8.91
	Glyphosate	92.4	82.7	91.8			3.77
	Hydrocodone	97.4	94.5	91.4			3.30
	Ibuprofen	74.6	71.8	72.5			0.918
	Imazapyr	97.2	70.7	69.7			1.14
	Imidacloprid	97.3	158	152			4.27
	Linuron	106	101	109			7.66
	MCPP	74.5	102	101			1.39
	Naproxen	58.3	65.2	51.4			23.7
	Primidone	75.8	75.5	68.6			9.54
	Pyraclostrobin	72.7	79.6	72.2			9.76
	Sucralose	104	104	110			5.30
	Triclopyr	42.2	62.4	65.8			5.28

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2082303, 2082304, 2082305, 2082306, 2082307
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2082303, 2082304, 2082305, 2082306, 2082307

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	05/01/2019	05/02/2019 10:00	Hoor Shaik	05/04/2019 15:05	Juyoung Kim	2082303
	05/01/2019	05/02/2019 10:00	Hoor Shaik	05/04/2019 15:40	Juyoung Kim	2082304
	05/01/2019	05/02/2019 10:00	Hoor Shaik	05/04/2019 17:24	Juyoung Kim	2082305
	05/01/2019	05/02/2019 10:00	Hoor Shaik	05/04/2019 17:58	Juyoung Kim	2082306
	05/01/2019	05/02/2019 10:00	Hoor Shaik	05/04/2019 18:33	Juyoung Kim	2082307
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 12:37	Rebecca Ware	2082303
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 12:45	Rebecca Ware	2082304
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 12:53	Rebecca Ware	2082305
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 13:02	Rebecca Ware	2082306
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 13:10	Rebecca Ware	2082307
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 20:33	Rebecca Ware	2082303
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 21:15	Rebecca Ware	2082304
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 21:29	Rebecca Ware	2082305
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 21:43	Rebecca Ware	2082306
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/06/2019 21:57	Rebecca Ware	2082307
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/07/2019 15:28	Rebecca Ware	2082303
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/07/2019 16:06	Rebecca Ware	2082304
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/07/2019 16:18	Rebecca Ware	2082305
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/07/2019 16:30	Rebecca Ware	2082306
	05/01/2019	05/02/2019 10:00	Rebecca Ware	05/07/2019 16:42	Rebecca Ware	2082307