U.S. DEPARTMENT OF AGRICULTURE
Grain Inspection, Packers and Stockyards Administration
Federal Grain Inspection Service

CERTIFICATE NO.: FGIS 2017-097

CERTIFICATE OF CONFORMANCE

Quantitative test kit for fumonisins in corn (including dent or field corn, cracked corn, corn grits or polenta, and corn screenings).

For: EnviroLogix Inc.
Method: Lateral Flow Strip

Submitted by: EnviroLogix Inc.
500 Riverside Industrial Pkwy
Portland, ME 04103
Telephone: (207) 797-0300
Contact: Dr. Anna Rice

Standard Features and Options

Model:	QuickTox Kit for QuickScan Fumonisin Flex, Product AQ 311 BG
Sample Preparation:	Grind sample so that ≥ 95% passes through a 20 mesh sieve
Extraction Method:	Shake 50-gram sample with 250 mL of distilled or deionized water on a mechanical shaker for 1 minute
Temperature Range:	18 – 30 °C (64 – 86 °F)
Fumonisin Level:	0.50 – 30 ppm
Detection Technique:	EnviroLogix QuickScan System

Test kits must be operated according to the GIPSA-issued instructions

This test kit underwent an initial verification of performance under the authority of Section 7B (c) of the United States Grain Standards Act, as amended, and was found to meet all test performance criteria as defined in "Design Criteria and Test Performance Specifications for Quantitative Fumonisin Test Kits," March 2016 version. Evaluation tests that passed are summarized in Attachment I.

For further information, contact:

USDA, Grain Inspection, Packers and Stockyards Administration
Technology and Science Division
Analytical Chemistry Branch
10383 N. Ambassador Drive
Kansas City, Missouri 64153-1394 Telephone: (816) 891-0401

Brian Adam, Acting Deputy Director
Technology and Science Division

Date: 2/21/17

Certificate Expires Three Years from the Date Signed

Note: The mention of firm name or trade products does not imply that they are endorsed or recommended by the United States Department of Agriculture over other firms or similar products not mentioned.

Type Evaluation
Certificate No.: FGIS 2017-097

ATTACHMENT I

Manufacturer: EnviroLogix Inc.
500 Riverside Industrial Pkwy
Portland, ME 04103
Telephone: (207) 797-0300
Contact: Dr. Anna Rice

TEST 1: TIME REQUIRED FOR COMPLETION OF AN ANALYSIS.

The data submitted by the manufacturer indicated that the analysis time required for one sample was less than the maximum limit of 30 minutes.

TEST 2: COMPARATIVE ACCURACY OF TEST KITS ON CORN SAMPLES NATURALLY CONTAMINATED WITH FUMONISINS.

The data submitted by the test kit manufacturer for four corn samples, naturally contaminated at approximately 0.5, 2, 5, and 30 ppm total fumonisins, met the performance criteria.

TEST 3: SUGGESTED ADDITIONAL COMMODITIES.

The manufacturer did not submit data supporting the performance of this kit for any additional commodities.

TEST 4: AVOIDANCE OF TOXIC OR HAZARDOUS SUBSTANCES.

The Material Safety Data Sheets provided by the manufacturer confirmed this test kit meets safety requirements.

TEST 5: SENSITIVITY TO ELECTROMAGNETIC FIELDS (EMF).

A statement of certification has been provided that indicated the EnviroLogix QuickScan System met the EMF sensitivity requirements.

TEST 6: TEMPERATURE SENSITIVITY.

The data submitted by the test kit manufacturer supported performance of the kit at 18 °C, 24 °C, and 30 °C.

TEST 7: STABILITY.

The data submitted by the test kit manufacturer supported storage and stability claims.

TEST 8: GIPSA PERFORMANCE VERIFICATION.

The data generated by GIPSA staff showed the test kit is capable of quantifying fumonisins in corn in the range of 0.50 – 30 ppm total fumonisins. The evaluation was conducted using the EnviroLogix QuickScan System.

United States Department of Agriculture

Attachment I - Summary of Verification Data for Test Kit (2016124QN)
Fumonisin in Corn

EnviroLogix QuickScan System

0.5 ppm Level		2 ppm Level		30 ppm Level	
Analyst	Reading	Analyst	Reading	Analyst	Reading
1	0.48	1	1.8	1	31
1	0.42	1	2.2	1	36
1	0.58	1	1.8	1	31
1	0.46	1	1.9	1	36
1	0.45	1	2.0	1	37
1	0.47	1	2.2	1	32
1	0.50	1	2.3	1	35
2	0.47	2	2.1	2	36
2	0.50	2	2.1	2	38
2	0.54	2	2.0	2	35
2	0.53	2	2.0	2	35
2	0.49	2	1.8	2	38
2	0.54	2	2.1	2	35
2	0.48	2	2.0	2	33
3	0.37	3	1.6	3	33
3	0.50	3	1.7	3	34
3	0.51	3	2.0	3	37
3	0.40	3	1.7	3	34
3	0.31	3	2.1	3	36
3	0.44	3	1.8	3	31
3	0.42	3	2.2	3	36
Total Out-of-Range	**0**		**0**		**0**
Acceptable Ranges	CRV ± 2*0.18*CRV		CRV ± 2*0.14*CRV		CRV ± 2*0.13*CRV

CRV – Certified Reference Value