



Certificate of Analysis

Sample Description: hummus
Client: Moms Across America Mission Viejo
Sample Mass: various

Sample Numbers: see below
Receipt Date: 2018-06-23
Test Date: 2018-08-10
Shipment Temp: +4°C
Storage Temp: -20°C

Samples:				Results:		
Sample ID#	Sample Description/ UPC Code	Lot # and Expiration Date	Sample mass (g)	Glyphosate (ng/g)	AMPA (ng/g)	Effective Glyphosate Level (ng/g)
S0003424	Kirkland Signature / Organic Hummus/ USDA Organic / 096619462674	Best Before 5/19/2018(50C 18) 19:34 L101	68 g	0.86	ND	0.86
S0003425	Trader Joe's / Hummus Dip / 00204118	Use by 04/26/18 10:36 C	454 g	30.19	0.32	30.67
S0003426	Sabra / Class Hummus / Non-GMO Gluten Free / 040822011143	14 057 Best Before 2018 May 11 02:06:96	283 g	14.35	D	14.35
S0003427	Cedar's / Original Hommus/ Non GMO verified / 044115008018	Sell by Jun 20 2018 (41C18) 18:52 L4	227 g	8.95	D	8.95
S0003428	Cedar's / Original Hommus / Organic / USDA Organic / 044115448012	Sell by Jun 27 2018 (91C18) 20:33 L4	227 g	9.73	ND	9.73
S0003429	Simply Balanced / Organic / Traditional Hummus / USDA Organic / 085239014868	Best Used By 5/22/2018 80795505A 0828	283 g	0.60	ND	0.60
S0003430	Sadaf / Hummus / Traditional / 052851626021	Use by 06/23/2018 17:52	283 g	12.63	0.70	13.68

S0003431	Sabra / Organic / Simply Roasted Pine Nut Hummus / 040822344456	43249.88867	907 g	0.43	ND	0.43
S0003432	Lilly's / Classic Hummus / Made with Organic Chickpeas / Non GMO Verified / 645136000267	09 Sep 2018 11:37	340 g	D	ND	D
S0003433	Hope / Organic Hummus / Spicy Avocado / 856500004013	Best by 05/12/18 Lot 031418	227 g	1.51	ND	1.51

Methods

Sample Analysis: HRI TM #8 "Glyphosate and AMPA Detection by LC-MS/MS"

Sample preparation employed a modification of the method described in Chamkasem, Narong, Cynthia Morris, and Tiffany Harmon. 2016. "Direct Determination of Glyphosate, Glufosinate, and AMPA in Milk by Liquid Chromatography/tandem Mass Spectrometry." *Journal of Regulatory Science* 3 (2): 20–26.

LC-MS/MS analysis employed a modification of the method described in Jensen, Pamela K., Chad E. Wujcik, Michelle K. McGuire, and Mark A. McGuire. 2016. "Validation of Reliable and Selective Methods for Direct Determination of Glyphosate and Aminomethylphosphonic Acid in Milk and Urine Using LC-MS/MS." *Journal of Environmental Science and Health, Part B* 51 (4): 254–59. doi:10.1080/03601234.2015.1120619.

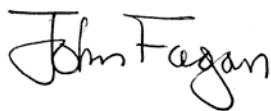
Limit of Quantitation (LOQ) and Limit of Detection (LOD) are sub-part per billion for this method and are determined for each sample.

D = Detected; result was above the limit of detection but not quantifiable

ND = Not Detected; result was below the limit of detection

Effective Glyphosate Level calculated according to Food and Agriculture Organization (FAO) method where total glyphosate residue is the sum of the weight of glyphosate + 1.5 × the weight of its metabolite AMPA.

Released on Behalf of HRI Laboratories by



Dr. John Fagan, Sr. Scientist

P.O. Box 370
Fairfield, IA 52556
+1 641-552-6258