



**Certificate of Analysis**

Sample Description: wine  
Client: Moms Across America Mission Viejo  
Sample Volume: 750 ml, each

Sample Numbers: S0001494-1589  
Receipt Date: 2017-07-25, 2017-08-04  
Test Date: 2017-08-14  
Shipment Temp: Ambient  
Storage Temp: Ambient

Samples:				Results:		
Sample ID#	Sample Description/ UPC Code	Lot # and Expiration Date	Sample Volume	Glyphosate (ng/ml)	AMPA (ng/ml)	Effective Glyphosate Level (ng/ml)
S0001494	Gallo Family Vineyard / Pink Moscato wine / 085000019900	LIA160516FD	750 mL	12.45	1.98	15.41
S0001495	Gallo Family Vineyard / Pink Moscato wine / 085000019900	LPO50315DG	750 mL	20.01	2.20	23.30
S0001496	Robert Mondavi / Private Selection Merlot red wine/ California 2015 / 086003000421	8067 43	750 mL	3.29	Not Detected	3.29
S0001497	Robert Mondavi /Private Selection Merlot red wine/ California 2015 / 086003000421	8067 28	750 mL	3.28	1.06	4.87
S0001498	Barefoot / Moscato white wine/ 085000016688	LQ300517NB / A20	750 mL	15.08	1.96	18.01

Sample ID#	Sample Description/ UPC Code	Lot # and Expiration Date	Sample Volume	Glyphosate (ng/ml)	AMPA (ng/ml)	Effective Glyphosate Level (ng/ml)
S0001499	Barefoot / Moscato white wine/ 085000016688	LQ300517NB / A29	750 mL	15.55	2.08	18.68
S0001500	Sutter Home / Chardonnay white wine / California / 08502625	L259514-13	750 mL	12.12	2.45	15.80
S0001501	Sutter Home / Chardonnay white wine / California / 08502625	L309607-13	750 mL	8.06	2.07	11.16
S0001506	Beringer / Chardonnay white wine / California 2015/ 089819001712	L060216N210 /5512 15	750 mL	8.82	Not Detected	8.82
S0001507	Beringer / Chardonnay white wine / California 2015/ 089819001712	L060216N210 /5512 27	750 mL	9.45	Not Detected	9.45
S0001508	Yellow tail / Shiraz/ red wine/ 2016 / Australia /031259008943	N/A, 19:41 L4	750 mL	6.85	Not Detected	6.85
S0001509	Yellow tail / Shiraz/ red wine/ 2016 / Australia /031259008943	L16140 19:55 L4	750 mL	9.20	0.69	10.24
S0001510	Hardy's Whiskers Blake / Classic Tawny / red wine / Product of Australia / 081434055200	L5135N2 15:14	750 mL	4.28	Not Detected	4.28
S0001511	Hardy's Whiskers Blake / Classic Tawny / red wine / Product of Australia / 081434055200	L5219N2 12:45	750 mL	4.33	Not Detected	4.33

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Sample ID#	Sample Description/ UPC Code	Lot # and Expiration Date	Sample Volume	Glyphosate (ng/ml)	AMPA (ng/ml)	Effective Glyphosate Level (ng/ml)
S0001512	Concha y Toro / Casillero del Diablo/ Cabernet Sauvignon / red wine / 2015 Chile / 082734001096	L1V116316 00:11 / 2	750 mL	16.08	Not Detected	16.08
S0001513	Concha y Toro / Casillero del Diablo/ Cabernet Sauvignon / red wine / 2015 Chile / 082734001096	L1V116316 00:11 / 18	750 mL	16.56	Detected	16.56
S0001588	Mendoza/ Santa Julia Organica/ organic red wine/ 089832848431	L16-014-102 06:15	750 mL	3.17	0.17	3.42
S0001589	Bonterra / Sauvignon Blanc / white wine / made with organic grapes / 082896062621	L020171218A / 111222161131	750 mL	0.29	0.06	0.38

Methods:

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.

Using this method:

- If the Rel SE is  $\leq 15\%$ , the sample is reported numerically and is greater than the LOQ.
- If the Rel SE is  $> 15\%$ , the sample is reported as "Detected" if the mean is greater than the LOD, or it is reported as "Not Detected" if the mean is less than the LOD.
- The LOD is equal to  $(t\text{-test coefficient}) \times (SE)$ .

Where,

LOD = Limit of Detection

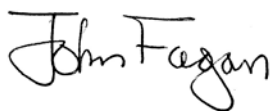
LOQ = Limit of Quantification

Rel SE = Relative Standard Error

SE = Standard Error

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

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