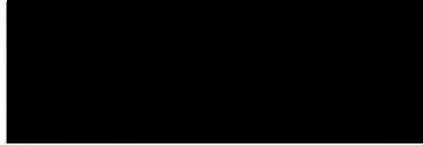


Microbe Inotech Laboratories, Inc.
Summary Report of Analysis
[MILB -4023A]

Athan Poulos
Lolonis Family Vineyards & Winery

August 9, 2016



Description and Chain of Custody Record Information:

- Tuesday, August 2, 2016 – 10:12AM: Received by Fed Ex Overnight two (2) liquid samples for Glyphosate detection by ELISA assay.
- MiL, Inc. REPORT and Invoice No.: MILB-4023A
- Project Name: 2015 SB&C

Sample Processing

To detect Glyphosate, an enzyme linked immunosorbent assay (ELISA) was used. The sample along with a glyphosate specific antibody is added to a well coated with goat anti-Rabbit antibody and incubated for 30 minutes. Then a glyphosate enzyme conjugate is added. A competition occurs between glyphosate that is present in the sample and the enzyme labeled glyphosate analog for the antibody binding sites in the well. The wells are washed and a color solution is added. The color solution causes a color change in the wells containing the enzyme labeled glyphosate analog. Since the labeled glyphosate was in competition with the unlabeled glyphosate in the sample the color development is inversely proportional to the concentration of glyphosate in the sample. The wells are read at 450nm to determine absorbance.

Samples are considered negative if the absorbance reading is greater than the absorbance reading for the lowest concentration of standard (Standard 1). Results are calculated based on a standard curve. Final results are calculated based on the dilution factor.

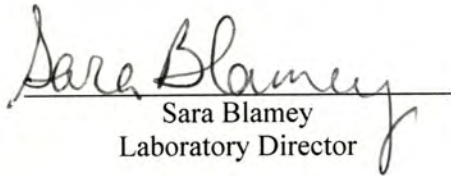
Results:

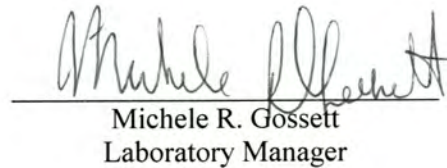
Sample Name	Dilution	Results in ppb
2015 Sauvignon Blanc	1:5	<0.375 ppb
2015 Chardonnay	1:5	<0.375 ppb

<0.375 ppb ND = result is below range of detection.

Disclaimer: the MiL, inc. is not a human clinical diagnostic laboratory and makes no warranty to the fitness of this data for such purposes.

Thank you from the staff on project:


Sara Blamey
Laboratory Director


Michele R. Gossett
Laboratory Manager



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MiL Project #:

B4023A

Client: LOLONIS FAMILY VINEYARDS + WINERY, INC. Analyses Requested (see page 2)

Contact: ATHAN POULOS

Address: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Project Name: 2015 SB+C Project Number: 001

Send Invoice to: Same as Above or: PO Number: _____

Attn: _____

Company: _____

Address: _____

Email: _____

Comments: _____

Sample Name or ID	Quantity	Date Collected	Time Collected	Sample Matrix
2015 SAUVIGNON BLANC	1	7/25	3:21 PM	
2015 CHARDONNAY	1	7/25	3:23 PM	
2015 SAUVIGNON BLANC	1	7/25/14	3:30 PM	

Relinquished By: Ath Poulos Date & Time: 7/25/14 3:30 PM Received By: Sara Blaney Date & Time: 8/2/16 10:23 am

Signature and/or sample submission indicates acceptance of MiL, Inc.'s standard terms and conditions.
 Terms: Net 30 Days. Finance Charge of 1.5% will be added to all overdue invoices.

Introduction

4023A Lolonis Family Vineyard

4023A-1: 2015 Sauvignon Blanc

4023A-2: 2015 Chardonnay

Experiment#1

		Plate#1														
		1	2	3	4	5	6	7	8	9	10	11	12			
A		1.189	1.261	0.990	0.938	0.476	0.495	0.753	0.743	0.573	0.564	0.244	0.259	Endpoint		
B		0.691	0.668	0.580	0.556	0.783	0.753	0.605	0.620	0.423	0.430	0.906	0.936	Lm1 450		
C		0.647	0.610	0.718	0.705	0.455	0.414	0.437	0.446	0.521	0.506	0.325	0.309	Automix: Off		
D		0.352	0.333	0.049	0.046	0.944	1.046	1.124	1.135					Calibrate: On		
E														Plate Last Read:		
F														7:29 PM 8/5/2016		
G																
H																

Wavelength Combination: !Lm1

Mean Temperature: 0.0

Data Mode: Absorbance

Reader: Vmax ROM v--

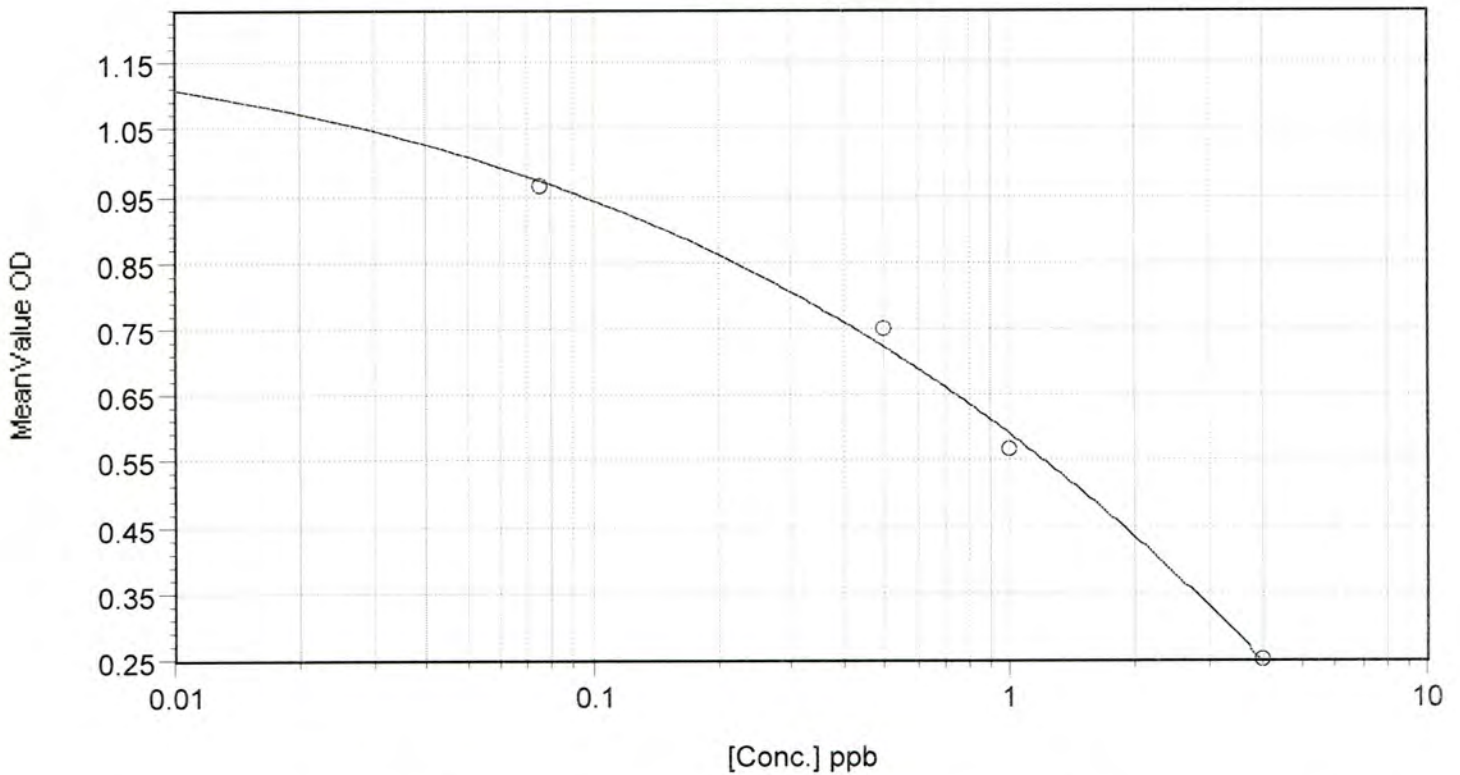
Standards (ppb)

Sample	[Conc.] ppb	BackCalc ppb	Mean BackCalc	Wells	Values OD	MeanValue OD	Std.Dev.	CV%
St00	0.000	0.001	0.001	A1	1.189	1.225	0.051	4.2
		Range?		A2	1.261			
St01	0.075	0.062	0.084	A3	0.990	0.964	0.037	3.8
		0.105		A4	0.938			
St02	0.200	Masked	Masked	A5	Masked	Masked	Masked	Masked
		Masked		A6	Masked			
St03	0.500	0.417	0.430	A7	0.753	0.748	0.007	0.9
		0.443		A8	0.743			
St04	1.000	1.082	1.106	A9	0.573	0.569	0.006	1.1
		1.129		A10	0.564			
St05	4.000	4.068	3.962	A11	0.244	0.252	0.011	4.2
		3.856		A12	0.259			

Smallest standard value: 0.252

Largest standard value: 1.225

Standard Curve



$$y = \left(\frac{A - D}{1 + (x/C)^B} \right) + D$$

○ Std (Standards: [Conc.] ppb vs MeanValue OD) A B C D R²
 1.224 0.408 34.873 -2.11 0.998

+ Control

Sample	Wells	OD Values	Mean OD Value	Glyphosate ppb	Std.Dev.	CV%
0.75	B1	0.691	0.680	0.635	0.016	2.393
	B2	0.668				

R - Outside standard range

4023A-1

Sample	Wells	OD Values	Mean OD Value	Glyphosate ppb	Std.Dev.	CV%
4023A-1	D5	0.944	0.995	0.058	0.072	7.249
	D6	1.046				

R - Outside standard range

4023A-2

Sample	OD Values	Mean OD Value	Glyphosate ppb	Std.Dev.	CV%
4023A-2	1.124	1.130	0.006	0.008	0.689
	1.135				

R - Outside standard range