

Name: **Wilmot Cattle Company**

Sample: **Wilmotco 3**

Analysis no.: **2216-3-MWSC** Date: **21/05/2019**

**Customer name**

Wilmot Cattle Company

**Date received**

21/05/2019

**Client name**

Stuart Austin

**Agent**

Microbiology Laboratories A

**Sample name**

Wilmotco 3

**Advisor**

**Type**

Compost, solid, n.e.c.

**Authorised by**

Dr Maria Manjarrez

**Date sampled**

15/05/2019

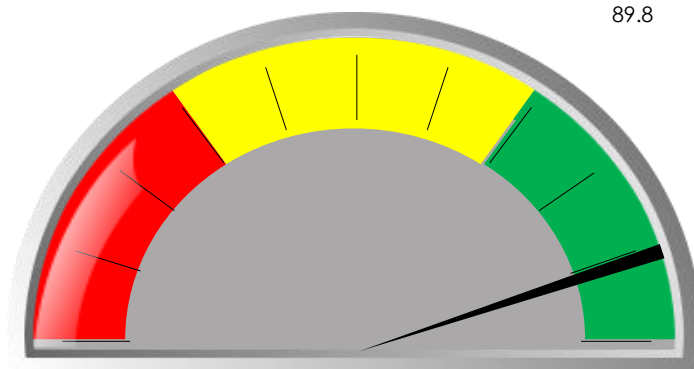
**Analysis no.**

2216-3-MWSC

## Compost Indicators

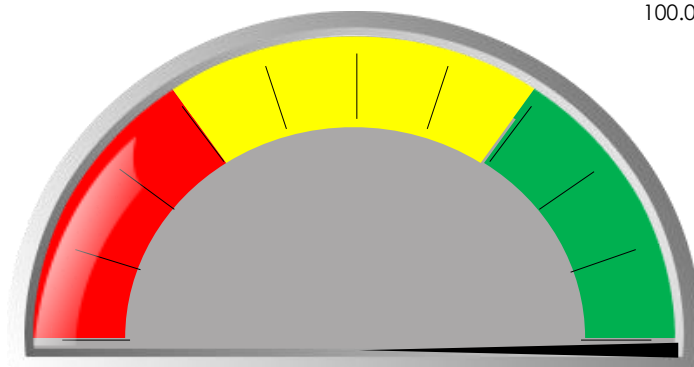
### Compost Maturity

89.8

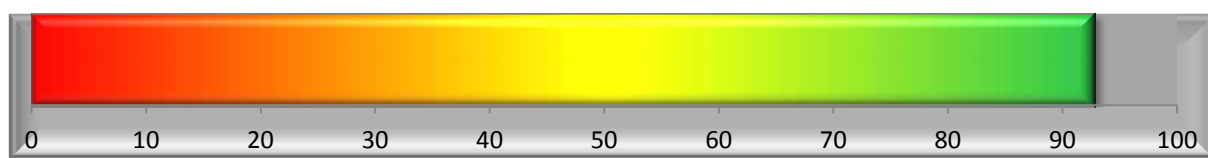


### Disease Suppression

100.0



### Overall Microbial Balance



For more information about these indicators visit us at [www.microbelabs.com.au](http://www.microbelabs.com.au)

Name: **Wilmot Cattle Company**

Sample: **Wilmotco 3**

Analysis no.: **2216-3-MWSC** Date: **21/05/2019**

## Key Microbe Groups

Group	Biomass (mg/kg)	
	Yours	Guide
<b>Total microorganisms</b>	<b>819.5</b>	50.0
<b>Total bacteria</b>	<b>90.8</b>	15.0
<b>Total fungi</b>	<b>712.7</b>	33.8
<b>Bacteria</b>		
Pseudomonas	<b>18.764</b>	1.000
Actinomycetes	<b>9.862</b>	1.000
Gram positive	<b>43.038</b>	4.000
Gram negative	<b>47.788</b>	11.000
Methane oxidisers	<b>0.649</b>	0.500
Sulphur reducers	<b>0.000</b>	< 0.005
True anaerobes	<b>2.214</b>	< 0.005
<b>Eukaryotes</b>		
Protozoa	<b>16.009</b>	1.300
Mycorrhizal fungi (including VAM)	<b>74.817</b>	10.000

Useful indicators	Yours		Guide
	Yours	Guide	
<b>Microbial diversity</b>	<b>27.7</b>		80.0
<b>Fungi : Bacteria</b>	<b>7.8</b>		2.3
<b>Bacterial stress</b>	<b>0.3</b>		< 0.5
<b>Compost maturity</b>	<b>89.8</b>		< 80.0
<b>Disease suppression</b>	<b>100.0</b>		< 80.0
Nutrients held in microbes	Concentration (mg/kg)		
	Yours	Guide	
Nitrogen (N)	<b>43.463</b>		3.450
Phosphorus (P)	<b>24.585</b>		1.500
Potassium (K)	<b>8.195</b>		0.500
Sulphur (S)	<b>8.195</b>		0.500
Calcium (Ca)	<b>8.195</b>		0.250
Magnesium (Mg)	<b>8.195</b>		0.250
Carbon (C)	<b>374.115</b>		22.688

### Key

**Poor**      **Fair**      **Good**

### Comments

Total microbial biomass was very good. Biomasses of other key desirable microbial groups were also very good, including Mycorrhizal fungi (VAM) and Protozoa. VAM fungi require a living plant host to survive, so their presence in this compost is a plus. Protozoa often appear after composts have aged for some time, and their presence here may indicate maturity. True anaerobes were elevated, which may indicate lack of aeration or waterlogging. The Fungi to Bacteria ratio was highly elevated compared to the guide, but this may be advantageous if the aim was to produce a fungi-dominated compost. Microbial diversity was poor. These results indicate that this compost would be a useful amendment, particularly to soils with low fungi.

### Explanations

The Microbe Wise test measures the biomasses of key microbial groups directly from your sample. It uses molecular ('DNA type') technology to analyse the unique cell membrane 'fingerprint' of each microbe type to identify and quantify key groups important to soil and compost processes. This method is more accurate and precise than other methods, such as direct microscopy or plate culture, because it uses chemical extraction to remove the maximum amount of microbial material from the sample and is repeatable to 0.01% between replicate analyses. It measures organisms that are alive or recently dead (within a few days). Always compare your results with a control sample. Guide values are included as a help, but because a large number of factors affect microbiology the guide levels may not be optimal for your specific conditions. Visit [www.microbelabs.com.au](http://www.microbelabs.com.au) for more information.

### Disclaimer

Analysis by Microbiology Laboratories Australia Pty Ltd ACN 145 073 481. The information in this report should be used under consideration of particular production conditions. The guide levels are derived from published data and ongoing research carried out by Microbiology Laboratories Australia. They are intended as a general guide only and do not take into account your specific conditions. Comparison of results with those obtained using other methods may be inaccurate, as accurate interpretation relies on specific sampling and analysis methods. Microbiology Laboratories Australia and its employees or agents will not be liable for any loss or damage arising from the use of the information supplied in this report. Please seek specific guidance and recommendations from a qualified agriculture professional.