



**SWEP**  
PTY. LTD.

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**ANALYTICAL  
LABORATORIES**

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**REPORT ON SAMPLE OF LIME**

**FILE NO :** 2203167694

**DATE ISSUED :** 24/03/2022

KAVANAGH - BELFAST LIME  
ATT: MICHAEL KAVANAGH  
5 STATION STREET  
ALLANSFORD, VIC 3277

**CLIENT ID :** KAV003  
**PHONE :** 0427 529 095

**SAMPLE ID :** LIME SAMPLE

**DATE RECEIVED :** 22/03/2022

**ANALYSIS REQUIRED :** Lime quality

ITEMS	ABBREVIATION	UNIT	RESULTS
Results of analysis on sample on dry weight basis:			
pH (1:5 Water)			<b>9.37</b>
Electrical Conductivity	EC	µS/cm	<b>76.2</b>
TOTAL CALCIUM	Ca	%	<b>34.7</b>
TOTAL MAGNESIUM	Mg	%	<b>1.53</b>
TOTAL SODIUM	Na	%	<b>0.206</b>
CALCIUM CARBONATE	CaCO <sub>3</sub>	%	<b>86.8</b>
	(Calculated from Total Calcium)		
MAGNESIUM CARBONATE	MgCO <sub>3</sub>	%	<b>5.36</b>
	(Calculated from Total Magnesium)		
MOISTURE CONTENT	MC	%	<b>1.52</b>
MATERIAL > 2mm		%	<b>0.283</b>
MATERIAL 1.00 - 2.00 mm		%	<b>1.84</b>
MATERIAL 0.85 - 1.00 mm		%	<b>3.68</b>
MATERIAL 0.30 - 0.85 mm		%	<b>92.8</b>
MATERIAL 0.075 - 0.30 mm		%	<b>1.27</b>
MATERIAL < 0.075mm		%	<b>0.127</b>
NEUTRALISING VALUE	NV	%	<b>93.1</b>
EFFECTIVE NEUTRALISING VALUE	ENV	%	<b>53.68</b>

**Notes on Neutralising Value**

Neutralising Value is a measure of the amount of acidity a material can neutralise, or in the case of lime, its total liming value. An approximation of Neutralising Value can be made by  $CaCO_3 + (2.5 \times MgO)$ .

Effective Neutralising Value is a calculated adjustment of the Neutralising Value, using the fineness of the lime. Lime retained on an 850 µm sieve (the coarser fraction) is estimated to be only 10% effective (fully utilised in the short term). Lime in the 300-850 µm sieve range (medium sized fraction) is estimated to be only 60% effective, while lime passing the 300 µm sieve (finer fraction) is estimated to be 100% effective.

Where a lime has a low Effective Neutralising Value (due to a high proportion of coarse fraction), further grinding should increase its effectiveness to change the pH.