

## SUEP, LTD.

## ANALYTICAL LABORATORIES

CLIENT ID:

PHONE:

ABN 26 005 031 569

Tel: (03) 9701 6007 Fax: (03) 9701 5712

**QUA018** 

02 4968 4468

## REPORT ON SAMPLE OF LIME

**FILE NO**: 1706127556

QUALTEST LABORATORY (NSW) P/L

ATT: DANE CULLEN 8 IRONBARK CLOSE WARABROOK, NSW 2304

SAMPLE ID: MARTIN'S LIME 22/5/17 SUPER FINE LIME

ANALYSIS REQUIRED: Lime quality

ITEMS	ABBREVIATION	UNIT	RESULTS
Results of analysis on sample on dry weight basis:			
pH (1:5 Water)			8.93
Electrical Conductivity	EC	μS/cm	192
TOTAL CALCIUM	Ca	%	38.2
TOTAL MAGNESIUM	Mg	%	0.373
TOTAL SODIUM	Na	%	0.02
CALCIUM CARBONATE	CaCO <sub>3</sub>	%	95.5
	(Calculated from Total	Calcium)	
MAGNESIUM CARBONATE	MgCO <sub>3</sub>	%	1.31
	(Calculated from Total Magnesium)		
MOISTURE CONTENT	MC	%	0.775
MATERIAL > 2mm		%	0
MATERIAL 1.00 - 2.00 mm		%	0
MATERIAL 0.85 - 1.00 mm		%	2
MATERIAL 0.30 - 0.85 mm		%	0
MATERIAL 0.075 - 0.30 mm		%	37
MATERIAL < 0.075mm		%	61
NEUTRALISING VALUE	NV	%	97.05
EFFECTIVE NEUTRALISING VALUE	ENV	%	95.3

## **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 CaCo3 + (2.5 x 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.