



# Department of Environment, Food and Agriculture

**Isle of Man**  
Government

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**Quoting Ref:**

Mr David Corlett  
Billown Lime Quarries  
Malew  
IM9 3EW

**Date: 14<sup>th</sup> June 2011**

Dear David

**Re: Particle Size Distribution in Liming Material**

Please find enclosed the government laboratory, which gives an estimated Effective Neutralising Value for the Billown material of 26%, based on a chemical Neutralising Value of the parent material of 49.6%. The calculator used to determine this is available at <http://www.aglime.com.au/liming-onlinelimecalculator.htm> . The UK standards for the particle distribution for liming materials is slightly less detailed, and can be calculated using the software at <http://www.aglime.org.uk/limecalculator01.htm> . Using this, the Billown lime comes out with an effective neutralising value of approximately 33%.

Either way, to achieve the same pH raising effect as a more finely ground material would provide, it is likely that a farmer would have to apply 1.5 – 2 times the amount of the Billown product to get the same effect. This would still be cheaper than most of the other liming materials being used in the island – even at double the normal rate Billown lime is likely to only cost **a third of the cost** of using granular/pelleted lime.

Pelleted limes (with the exception of burnt/kibbled liming products) are no more effective at raising soil pH than conventional ground limestone, and are significantly more expensive. Most are made by taking very fine ground limestone dust and compressing it into a pellet. The application rates recommended would not provide much if any detectable pH raising effect. The wording of their promotional material however, can at best be confusing, and at worst deliberately misleading and approaching a breach of most trades descriptions acts.

If the Billown product is approximately £29/tonne delivered and spread, then if a higher quality (smaller particle size) liming material could be imported to be delivered and spread for circa £50/tonne, then this is likely to slightly be more cost effective at raising soil pH than using Billown lime. Similarly, if the basic slag products currently available could be



**CERTIFICATE OF ANALYSIS**

**DETAILS**

Sample	Lime Sample
Source	Billown Quarry
Submitted by	John Harrison, DEFA
Date of Submission	May 26 <sup>th</sup> , 2011
Reason for Submission	Particle distribution

**EXAMINATION**

>1mm	45.3%
0.5 – 1mm	23%
0.25 – 0.5mm	15.3%
0.125 – 0.25mm	6.6%
<0.125mm	9.7%

**P M Lenartowicz**  
Government Analyst

Notes:

- < =less than, µg=micrograms, mg=milligrams, l=litres, cfu=colony forming units, MPN=most probable number.
- Sampling not undertaken by laboratory unless otherwise stated – results relate to the sample as submitted.
- Further information on methods of analysis may be obtained from the above address.
- Although the Laboratory operates a rigorous quality system, it is third-party accredited only for a representative range of its work. Unless otherwise confirmed it cannot be assumed that any or all of the work reported herein is accredited - for details of tests that are covered by accreditation see the scope published on our website, [www.gov.im/defa/enviro/govlabs](http://www.gov.im/defa/enviro/govlabs), or apply to the Laboratory.