

R 1954/108-109 Factors to be considered:-

1. Quantity of Stone
2. Quality of Stone
3. Ease of Quarrying
4. Accessibility
5. Proximity to Markets

1. QUANTITY OF STONE AVAILABLE

In this area the lack of outcrop makes any close assessment of quantities of rock impossible. In the plan accompanying this report the approximate boundaries of the limestone are shown, as well as the contour of the hill. From this map, an inexact estimate of quantities may be made; inexact for several reasons:-

- (a) Owing to the absence of outcrop, the actual boundaries of the limestone with the mudstone cannot be shown. However, the strata is practically horizontal and the mudstone seen in the small quarry in the north of the area, and the mudstone pieces on the top of the hill indicate an original width of limestone beds of about 40 feet. Much of this, of course, has now been eroded away.
- (b) Near the surface the weathering of the limestone has resulted in the formation of a soft powdery marl, some of which I understand has been used locally. This marl occurs in pockets on top of and included in the unweathered stone and the depth of it will vary considerably from place to place.
- (c) The depth of overburden also will vary from place to place but it is not expected that this soil depth will be generally greater than a foot or so.

Taking all these various factors into consideration some sort of estimate of tonnage may be made in a rough way and a figure of between three and five hundred thousand tons of rock and marl is suggested. However to determine any accurate figures a boring campaign should be instituted and a recommendation for this will be made later.

2. QUALITY OF STONE

Generally speaking the quality of the Permian limestones is not as high as that of the older rock which is the usual source of lime in Tasmania. However these beds are comparable with those worked at Granton for so many years. Four samples taken here by me in 1947, from the limited outcrop available, showed an average  $\text{CaCO}_3$  content of 78%. Samples of the marl, analysed by the Government Analyst, showed 77% of  $\text{CaCO}_3$ . Thus although not a high grade stone it appears quite adequate for use as Agricultural Lime. As at Granton, narrow bands of shaley material may be included in the beds.

**3. EASE OF QUARRYING**

There should be no difficulty in obtaining the stone by means of opencuts.

**4. ACCESSIBILITY**

Access is extremely good. A motor road leads to within a few hundred feet of the deposits.

**5. PROXIMITY TO MARKETS**

The question of markets is outside the scope of my investigation.

**RECOMMENDATIONS**

As this deposit is such a small one it is not recommended that any large scale development work be undertaken without first accurately determining the reserves of stone. A short boring campaign is, therefore, necessary. This should be done by a small core-drilling plant and a tentative scheme of drilling is outlined on the attached plan. The depths of the holes would probably range from 20 to 60 feet. The information obtained would indicate not only the quantity of stone available but would give some idea of grade. Reports on this deposit have already been made by me in 1947 and 1953.

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