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1947/12

REPORT ON DOLOMITE DEPOSITS, WALL'S SIDING, NEAR MUDGEE, N.S.W.

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GEOLOGY AND GEOPHYBICS.

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INTRODUCTION

This deposit is situated near Wall's Siding, 10 miles east of Hudgee, on the Hudgee-Sydney railway line. It is owned and worked by Metropolitan Lime and Cement Company.

The area has been examined by F. A. Booker, Geological Survey of New South Wales, and he prepared two plans which accompany this report. After inspection of the area, the construction of further plans was not considered worthwhile, though some additional information was placed on Er. Booker's plans.

This report should be read in conjunction with the report by H.J. Cook, Mining Engineer on "Limestone and Dolomite Deposits at Cow Flat and Wall's Siding, New South Wales," dated 18.3.47. (1947/90)

GEOLOGY AND GREER RELIGION ...

The general appearance of the area is shown on Mr. Booker's plan of the leases. The southern quarry on P.M.L.11 appears to have contained most of the dolomite showing in this lease. The dolomitic beds appear to have been folded into an anticline with a steep south pitch. At the southern end of the quarry, there is a local reversal of pitch to the northward. This structural information strongly suggests that extensions of the deposit are likely to occur in depth rather than laterally. This is unfortunate, as the main quarry is now under water and, owing to the proximity of Lawson's Creek, the cost of pumping out the quarry would be very considerable.

Along the western wall of the quarry, the dolomite and limestone are overlain by slate dipping at approximately 45 degrees to the westward.

No close measurements were taken of the dolomite remaining in the walls of the quarry, as it was clear from inspection, that there was insufficient to warrant any large-scale expenditure. It is considered that up to 10,000 tons might be won from present benching operations on the western wall. This dolomite is mixed with soil and practically valueless material in the ratio of approximately 1:1 and, in addition, it is not readily accessible. It is doubtful whether it can be mined at a profit by the methods employed - referred to by the Mining Engineer as "scratching."

some further dolomite may be available along the northeastern wall of the quarry, but chances of lateral extension in this direction do not seem good and hence, it probably would not be economic to incur the heavy expense which would be involved in reopening this section.

No. 2 charry P.M.L. 10. A plan of the quarry was made by F.W. Booker. This, with some additions, accompanies this report.

The quarry is roughly rectangular and, at the surface, measures approximately 90 feet by 90 feet. In this quarry, a lens of dolomite, some 50 feet in width, has been mined over a length of 80 feet, but has now died out along the strike. Thus, both the northeastern and southwestern faces of the quarry are now mainly in limestone, though, at the time of Mr. Booker's examination, they contained dolomite. A width of 6 feet of dolomite is showing at one place in the face of the most northerly corner of the open cut, but it is not continuous over the full height of the face.

Mixed limestone and dolomite boulders outcrop northeast of the quarry over a width of approximately 20 feet for the length of the quarry. North of the road entry to the open cut, limestone boulders outcrop over an area measuring approximately 60 feet by 50 feet. Apart from these outcrops, the surrounding country is covered by deep soil.

Hence, there are no visible reserves of dolomite at this quarry and, although futher deposits may occur, the prospect is not a good one. The main reasons for this 4~~ --

- (1) The lens worked to date is very small.
- (2) The ratio of dolomite to limestone has been approximatel; 1:1 which is relatively low.
- (3) It seems likely that the limestone occurrences themselves are not extensive. Limestone is hard and tends to outcrop; it is probably that most of the soil covered area is not underlain by limestone formations. Both quarries are situated on small hills, largely composed of limestone.

Thus, in spite of the fact that the greater proportion of the leases is covered by soil, it is considered probable that they contain only small deposits of limestone in which dolonitic replacement has been moderate to weak.

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