

NOTES ON DOLOMITE DEPOSITS

Of the known deposits, those on the Montagu River, Black River and at Nabageena have not been mapped.

The Irishtown deposits is covered to the south by basalt flows. Apart from this, conditions are apparently favourable for quarrying. Our knowledge of the grade of this deposit rests solely on the result of one sample. This is No. 14 of Bulletin No. 41, across 200 feet of a cutting on the Wiltshire - Irishtown railway.

The Smithon (or Duck River) deposit is undoubtedly the larger of the two mapped deposits. It occupies the flat country and is covered by sands - up to 10 feet deep as far as proved, and exposures are limited to narrow strips along the rivers, to shallow road-metal quarries, and to narrow drains. The western limits of this deposit have not been mapped.

The geological evidence of the extent of this deposit is based on a sound foundation, but evidence as to grade is limited to the shallow exposures which form a very small and inadequate percentage of the total area.

The information that is available shows that the dolomite grade is very high. It is stated that in the case of the Irishtown deposit that there are numerous veins of quartz reefs and that there are cases where the dolomite is partly or wholly silicified.

In the Duck River deposits, one large quartz reef has been recorded and one of the shallow prospecting shafts bottomed on what was considered to be cherty material, rather than a quartz reef.

The details of the shafts are as follows (v. Report by F. Blake 5/2/32) :-

<u>SHAFT NO.</u>	<u>DEPTH</u>	<u>REMARKS</u>	<u>BOTTOM</u>
1	7'	Sunk in sands, quartz gravels	Dolomite
2	9'	" " "	Dolomite
3	9'	" " "	Dolomite
4	6½'	" " "	Quartz
5	3'	" " "	Not bottomed
6	4'	" " "	Dolomite
7	12'	" " "	Not bottomed

The results of the sampling of the quarries is given in Bulletin 41.

The information concerning the grade of dolomite is thus very meagre and additional information is necessary to prove that the known values extend to the depth to which it is intended to quarry, to determine the extent of the quartzose bands and to supply any other information that may be of aid in mining. The depth of the sand covering should also be accurately determined so that the quantity of overburden can be accurately assessed. Core boring is considered the best method of testing the deposits.

As the beds have a general dip of about 40° to the west, the bore holes should be inclined to the east, that is, at right angles to the dip.

The spacing of the drill holes would be governed by the minimum quantity that it is desired to test. The quantity that is present in the deposits is apparently of such magnitude that all the deposits cannot be tested in detail.

Some idea of magnitude of the deposits can be gleaned from the following (P.B. Nye - Typewritten Report 5/3/32):

"Duck River Deposit: At least five miles long and at least 2½ miles wide, with a thickness of approximately 9,000 feet.

Edith Creek: quarrying operations could be quarried over about 15 acres.

Irishtown: Covers area of about 200 acres. It actually outcrops only over about half this area. Part could be extracted by ordinary quarrying but greater part could be extracted by sub surface methods."

It is stated that the Black River and Montagu deposits may be of the same magnitude as the Smithon deposit.

As far as available information goes, the dolomite near Blackwood Bridge is of very high grade, and boring could be commenced here. Whilst this boring is in progress, the other deposits could be examined in detail.

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