

*For Protection*

DEPARTMENT OF MINES

SOUTH AUSTRALIA

MARBLE DEPOSIT

SECTION 422, HD. MOOROOBROO

by

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MINERAL RESOURCES SECTION

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Map No.

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MICROFILMED

MARBLE DEPOSIT

SECTION 422, HD. MOOROCROO

1. ABSTRACT

Pale pink, white and grey marble outcrops extend for about 20 chains over a ridge on section 422, Hd. Moorocroo, two miles east of Angaston. The pink marble is an attractive stone, similar to, but paler than "Angaston pink" marble. The volume of stone above the level of the lowest outcrop is estimated at roughly half a million cubic yards.

The marble could be readily quarried, and it is suggested that the land-owner endeavour to interest the monumental and building trade.

2. INTRODUCTION

Mr. David Tweedie has brought to notice a deposit of pink marble on part of his property, section 422, Hd. Moorocroo. As indicated in the accompanying locality plan, the section is two miles by unsealed road east of Angaston (49 road miles north-east of Adelaide). The section is "private land" in the terms of the Mining Act.

The marble was examined on May 6th, 1959 with the aid of a Hundred plan and air photo; subsequently a plan of Mr. Tweedies was used in preparing the accompanying geological plan.

3. GENERAL DESCRIPTION

The northern half of section 422 is composed of a ridge which falls fairly steeply to the creek forming the eastern boundary of the section and less steeply to the south and west. Outcrops of pink marble extend north-westerly across the ridge from its southern end. From the relationship of the marble outcrops to the topography, the body of marble appears to be steeply dipping to the south west. The belt of marble is about 20 chains long and 5 chains wide. The Truro one-mile geological map (unpublished) shows the marble (Cambrian) as overlying the Sturtian (Proterozoic) quartzites and folded into a north-pitching anticline.

The marble shows variations in colour, composition, and grain-size as indicated in the sketch plan. The central outcrops are composed largely of marble in various shades of pink. The south-eastern and north-western extremities of this zone are fairly pure coarse-grained marble, (with calcite crystals frequently up to  $\frac{1}{2}$  inch in diameter) similar to but paler and finer-grained than the accepted Angaston pink marble. Marbles in the middle of the zone are often finer-grained and less pure, being mottled, or flecked with green actinolite.

Marble of the marginal outcrops is mostly white, grey or pale pinkish brown. White marble is most evident near the south east margin. The rock shown as "calc-silicate" on the plan is a dark grey impure fine-grained marble.

#### 4. DEVELOPMENT

As pointed out by Mr. Tweedie, the marble is so situated that it could be more readily quarried than the Angaston marble at present being exploited south of the township. The difference in elevation between the middle of the deposit (near the top of the ridge) and its south-eastern extremity is estimated to be over 100 feet. Suitable points at which to begin quarrying would be about 4 chains north-west of or 8 chains N.N.E. of the shed.

The total reserves of marble on section 422 above the level of the shed are estimated conservatively at about half a million cubic yards.

#### 5. CONCLUSIONS

The value of the marble deposit on section 422 will depend on the acceptability of the stone to the trade and the proving of a suitable volume and distribution of this stone.

This preliminary appraisal indicates that the deposit is promising, although perhaps only a third of the total estimated volume would be suitable for quarrying. It is recommended that Mr. Tweedie approach members of the monumental and building trade, who may be interested in developing the deposit.

B. G. Forbes

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GEOLOGIST

# LOCALITY PLAN



### LEGEND

Marble

Pink : p  
White : w  
Grey : g

Brown - b.  
Mottled - m.  
Actinolitic - o

Calc-silicate rock

Quartzose rock

To accompany report by B. G. Forbes, Geologist.

S.A. DEPT. OF MINES

PINK MARBLE DEPOSIT  
SEC. 422 HP MOOR00R00

Approved

**Pas'ev**

### Sample

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Director

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