

Section 1—Economic and General Geology

TR12-11-14

1. REPORT ON VISIT TO DULVERTON BRICKWORKS

by V. M. Threader

A visit was made to the above company at the request of Mr A. Luck. Three days were spent examining:—

- (1) The recently opened bush pit at the brickworks,
- (2) The disused clay pit at the Dulverton coalfield.

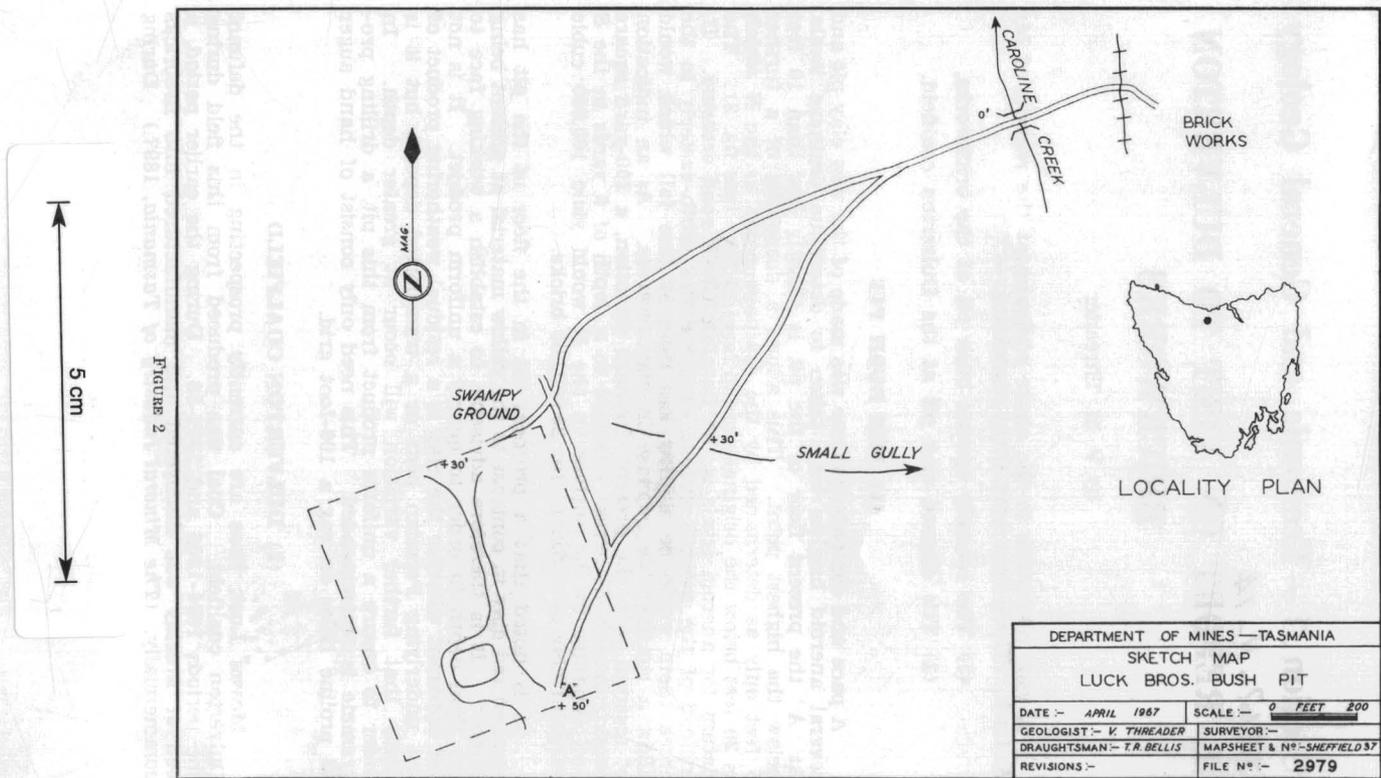
(1) THE BUSH PIT

A pace and compass traverse was made of the new clay pit and several aneroid heights were taken to determine drainage levels. At 'A' the present floor of the pit is slightly less than 10 feet below the highest point. This allows a deepening of a further 5 feet only as determined by the drainage point to the N which is 20 feet below the original ground level at 'A' (see fig. 2). The datum for aneroid levels is the Caroline Creek road crossing. If, instead of the present system, drainage was south-easterly to the creek there would be slightly less than 50 feet fall which would allow a considerable increase in clay reserves. As an indication of reserves with the present drainage direction, a 200-yard square (approximately $8\frac{1}{4}$ acres) quarried to a depth of 6 yards in the S and tapering to the surface in the N would yield 100,000 cubic yards of clay or sufficient for 25,000,000 bricks.

It is noted that a prospect pit in the floor of the pit has exposed red clay in contrast to the yellow material at present being worked. It is therefore advisable to establish a working face to the final depth in order to quarry a uniform product. It is not yet apparent whether the clay is a residual weathering product of the underlying Permian beds or a transported deposit, but it is likely that further variation will occur at greater depth. In order to ensure a uniform product from this pit, a drilling programme is recommended. This need only consist of hand auger or proline holes on say a 100-foot grid.

(2) DULVERTON COALFIELD

Messrs Luck Bros are currently prospecting in the defunct Dulverton coalfield. Coal was produced from this field during the periods 1894-1906 and 1931-38. During the earlier period, a bed of fireclay was discovered and manufactured into firebricks commercially. (*The Mineral Industry of Tasmania, 1897.*) During



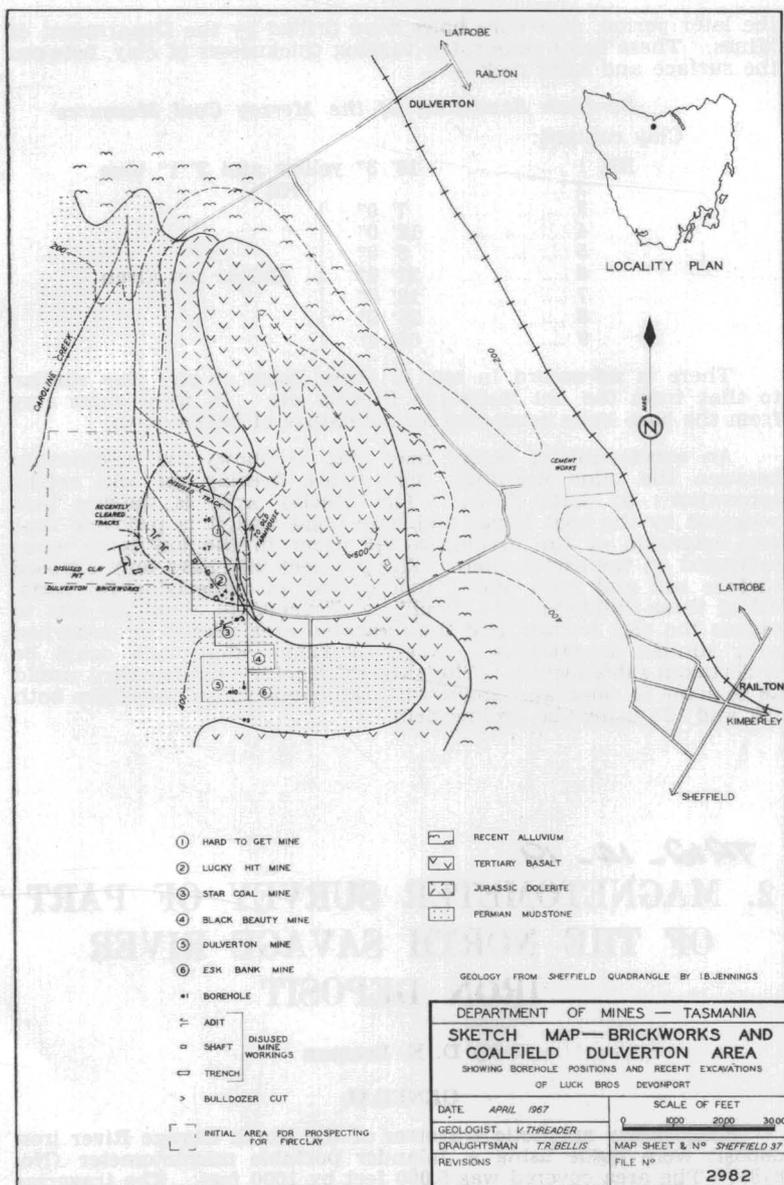
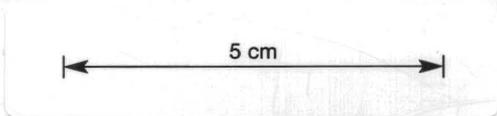


FIGURE 3



the later period, nine bore holes were drilled by the Department of Mines. These holes penetrated varying thicknesses of clay, between the surface and hard rock—

Permian Sandstone of the Mersey Coal Measures

Clay content:

BH 1	18' 3" yellow and 3' 1" blue	
2	Nil	
3	7' 0"	} Colour not given
4	.....	12' 0"
5	.....	5' 0"
6	.....	27' 0"
7	.....	12' 0"
8	.....	26' 0"
9	.....	68' 0"

There is no record in any of these holes of any clay similar to that from the old Dulverton fireclay pit. In most cases clay from the bore holes contained an admixture of basalt scree.

An accompanying sketch map (fig. 3) shows the relationship between the mine workings, bore holes, fireclay pit and recent excavations by Luck Bros. The fireclay area is outside that occupied by the coal mines and bore holes and it is probable that any extension of the fireclay would occur in the low lying areas indicated on the sketch map. The prospect pits have only exposed surface soil and sand and a foot or two of underlying fat sand. All of these bulldozer cuts should be deepened to about six feet to expose the clay horizon and the indicated area should be patterned with similar excavations. Augering below these cuts could be undertaken subsequently. The most satisfactory arrangement would be to come to some agreement with the company to undertake both (1) and (2) using the proline drill.