5th September, 1949.

MEMORANDUM:

Coal at Espie's Property, York Plains.

Mr. J.H. Espie, the lessee of lots 1 and 2 of the Hillhouse Estate, York Plains, has entered into an agreement with certain hopgrowers to permit them to mine coal on a royalty basis on the land he is occupying.

The Closer Settlement Board, as owners of the land, are desirous of certain information in relation to this coal. They wish to ascertain:

- The area occupied by the coal;
- Means of Entry and Egress to possible workings; and
- 3. Area required for dumping purposes.
- 1. The possible maximum extent of the coal seams is limited by three distinct factors :-
 - (a) Faulting. Near the eastern boundary of
 Lot 1 is a fault with the downthrow to the
 west. To the west of the fault the coal
 measures (felspathic sandstones) outcrop,
 while to the east are the barren Ross
 Sandstones. This fault, therefore, limits
 the possible Eastern extent of the coal
 measures.
 - (b) Contour of the surface. The contour of the country limits the occurrence of the coal seam to the north and west. On the accompanying plan the position of the theoretical outcrop of the seam is indicated. The only place the coal can be seen on the property is at the mouth of a small adit which has collapsed. As this is near the fault, the strata may be rather disturbed so that the plotting of any theoretical outcrop can only be taken as a general indication of the actual position of the coal seam. The southern limits of the possible seam are, of course, the southern boundary of the property. At this point, if faulting or any disruption of the strata is absent, the coal seam should be about 120 feet beneath the surface.
 - (c) Dolerite Dyke. A clearly defined dolerite dyke, striking at 3250 and about 30 feet in width cuts through the possible coal beds. Coal may, of course, occur to the west of this but would need to be considered as a separate mining proposition from that to the east.

All these factors may be seen clearly/the accompanying plan which shows that the maximum possible area of the coal to the East of the dyke is 15 acres and to the west of the dyke 10 acres. An upper seam of coal is reported from an old shaft now filled but this is apparently very limited in thickness and the

area also would be very small.

No estimate of tonnages can be attempted as the average width of the seam is not known.

- 2. The access to the possible workings is good. A road with a grade of less than 3° could be constructed for 8 chains from the York Plains Road to the workings. This is shown on the attached plan.
- 3. A dump area could be readily established iné small depression on the eastern edge of the possible workings. This is also shown on the plan.

From the above, it can be seen that the area of coal-bearing strata within these blocks is very small. A figure mentioned as the amount of coal required per annum was 30 tons. The entry to the possible workings from a public road is very short. Hence it does not appear that any contemplated production of coal from this area would seriously affect the land for agricultural purpose.

T.D. Hughes.

<u>GEOLOGIST</u>.

The Director of Mines,
HOBART.