

UR 1945/42-43

42.

SWC/3

24th August, 1945.

MEMORANDUM:BROWN COAL ON KING ISLAND.

In accordance with your memorandum of the 9th July, 1945, I visited King Island on Tuesday, 24th July, and contacted Mr. Davis, Stock Inspector of the Department of Agriculture and requested him to accompany me to the deposit to be examined. Mr. Davis was willing to drive me but stated that he had no knowledge whatever of any report on the existence of Brown Coal on King Island. As it was clearly not your intention that I should make a systematic search for Brown Coal seeing that you had instructed me to allow only one field day for the examination, I contacted Mr. Wherret, District Agricultural Officer, and Mr. Moore, Town Clerk, in order to trace the origin of the report to be investigated. Both these officers denied all knowledge of such report. Mr. Moore telegraphed a Mr. C. Button, a councillor, then in Launceston and received a reply that although not responsible for the report he had seen a seam of brown coal seven years ago just above high tide mark on the coast east of Lake Martha Lavinia, where the sea was eroding the sand dunes, I accordingly proceeded to the road end at Mr. Haine's property at Egg Lagoon accompanied by Mr. Wherret, and by covering the remaining four miles at a jog trot reached the specified locality three quarters of an hour before dark. I examined the eroded dunes for a mile along the beach but found no sign of brown coal in the dunes. At the base of the dissected dunes there is a bed of partially cemented manganiferous sand about 5 feet thick (Sample 2C1). This has a dark brown to black colour and viewed from a few feet distance looks rather like a coal seam. However, on the beach between tide levels I found one large and some smaller blocks of lignite (Sample 2C3). This has come from a seam of lignite at least one foot thick which must outcrop somewhere in the vicinity. It may occur below the manganiferous sand referred to above, but if so all outcrops are at present obscured by thick sand drifts, although it may have been exposed when the area was visited by Mr. Button seven years ago. Mr. Wherret agreed to return later with a shovel accompanied by Mr. Button and expose the area below the manganiferous sand to see whether the lignite really outcrops there.

If the assumption proves correct that the lignite occurs at the base of the dunes, it probably originated in the following way:- During the late Pleistocene or sub-recent times a retreat of sea level by about 15 feet left a considerable stretch of strand line sand exposed to the wind as a raised beach. The wind quickly developed coastal sand dunes which blocked the normal drainage outlet resulting in the formation of Lake Martha Lavinia which at that time extended eastwards some distance beyond its present boundaries. The dunes became fixed by vegetation, and for a considerable period there was stability and the weed growth of the lagoon accumulated as peat. Then following an unusually dry period the dunes started to move inland again, and encroached over the lagoon so that

new sand dunes were built up on top of some of the newly formed peat, and Lake Martha Lavinia was reduced to its present size. More recently the sea has been encroaching on the dunes by the sapping action of the waves, and has exposed a section of the dune overlying the manganiferous sand and the peat now hardened to lignite. A sample of the lignite has been collected for laboratory tests.

Lignite was also reported several years ago in the Sea Elephant River district. A well was sunk in 1936 by Mr. R.H. Hooper in the extreme south-east corner of his property (King Island 27/17), and bottomed in lignite at 16 feet. A sample was sent to the Secretary of Mines and was identified as lignite (27/2/36).

To sum up I report that because of the wrong information contained in your memorandum, and the fact that time specified was quite inadequate to make a systematic search, I am unable to affirm or deny the existence of Brown Coal in King Island. Lignite does occur in at least two places and a sample is available for testing. No data concerning quantities can be supplied but could be determined if required. A number of deposits of peat occur. Some of these have been systematically samples, and will form the subject of a separate report.

S.W. Carey  
GOVERNMENT GEOLOGIST.

The Director of Mines,  
HOBART.