957/No 3

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REPORT ON EL 16/70 S.W. TASMANIA

FOR MINING OPERATIONS BY T.O. HUGHES

Rep on EL 16/70 S.W. Tas
for Mining
by
T.D. Hughes 14/8/78.

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REPORT ON E.L. 16/ 70, TASMANIA.

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AREA. This is almost a square block of 54 square miles.

LOCATION AND ACCESS. This is located to the North and East of Strahan, a port of limited capacity on the West Coast of Tasmania. The highway, linking Strahan with Queenstown runs generally close to the Southern boundary and then parallel to the Eastern boundary and about three miles distant. A secondary road, once the Strahan-Zeehan Railway runs close to the Western boundary and, in the north-west portion, new Forestry roads for four-wheel drive vehicles go into the area for a few miles.

TOPOGRAPHY AND VEGETATION. The area is a dissected plateau of less than 1000 feet above sea level, bisected by the Tully River and its tributaries. Farther south, Manuka Creek is at first parallel to the Tully, but near the Western boundary, turns South and enters Macquarie Harbour at Strahan. Near the Western Boundary are sandhills covered by light scrub. The majority of the area is composed of Silurian rocks, which do not carry a thick undergrowth. The Cambrian rocks are covered by thick vegetation and are of limited outcrop.

GEOLOGY. Cambrian rocks are the oldest recorded in this E.L. They cover a small area and consist of a volcanic sequence intruded by quartz felspar porphyries. Most of the Eastern half is occupied by Silurian rocks consisting of siltstones with minor quartzites and shales, all probably equivilent to the Bell Shales. These rocks also extend in places into the Western half. This however is mainly covered with Permian mudstones and Tertiary sands,gravels and clays. Further South, these Tertiary beds contain thin seams of brown coal.

PAST REPORTS.There are no past reports , on this area generally, by the Department of Mines. They are, however, mapping the Strahan Quadrangle, of which this E.L. is a part, at present. Work is suspended for the winter, but it is hoped to be completed by next field season. Any information, and quite a lot of mapping has been done, is available to the Company's geologists.

MINERAL PROSPECTS. Host Rocks.Nearly a quarter of the E.L.,in the west, is occupied by Permian and Tertiary deposits and may therefore be discarded. Most of the remainder consists of Silurian sediments, which in the neighbouring Zeehan area may contain minor mineralization. The most favourable host rock age, the Cambrian, is represented by a small area, two miles by one, adjacent to the highway, about the centre of the Southern boundary.

Source Rocks. There are no intrusive Devonian Granites or Cambrian Ultra-basics in or near this E.L.

Secondary Deposits.There are extensive sand dunes in the Western section which may contain some heavy mineral concentrations.

PREVIOUS PROSPECTS. I can find no record of reported mineral occurrences in this area, and, being as it is, fairly accessible and in the neighbourhood of active mining fields, it must have been well prospected. However, the deep weathering of the Cambrian rocks, and hence paucity of outcrop, may possibly conceal mineral deposits, not observable by ordinary surface

(57)

prospecting.

Just outside the South-east corner of the E.E.,is a silver-lead prospect. Asmall shaft, 20 feet south of the road, reveals sparsely disseminated galena and pyrite in iron stained quartz. The vein strikes at 140° with a dip of 80° to the west and has been followed for 24 feet in a trench in quartzite. At the road the quartz can be seen but there is no mineralization. This occurrence has been reported on by L.E.E. (Lyell-E.Z.-Explorations)but they were not enthusiastic. This Company has also made a general report on the geology of the Area.

RECOMMENDATIONS. From the above, it can be seen that this is not a favourable mineral area. No time should be wasted in a Geological survey, as this is being done by the Mines Department.

Geophysical Survey. The area has already been flown, in the north by Rio Tinto and in the south by L.E.E., with some overlap. Neither of these Companies found worth while targets for follow-up ground geophysical work.

Geochemical Survey. Some quick geochemical work should indicate if there is any possibility of mineral deposits. This should consist of (1) Traverses across the Cambrian rocks. Ten traverses,each one mile in length, should be sufficient. (2) A reconnaisance traverse, across the Silurian rocks, up the course of the Tully River.

A reconnaissance survey of the sand dunes should be done to see if such heavy minerals as ilmenite, rutile or zircon exist in sensible proportions.

The silver-lead prospect on the Strahan Road could be looked at again.

Trevor D Hughes

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