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REPORT ON EL 15/70 FOR
MINE OPERATIONS
BY
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minings

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AREA. This is an irregular shaped area in the South West of Tasmania. of 765 square miles. Its shape seems to have been chosen to avoid any known mineral areas, but this was doubtless because it was the only land available at the time of pegging.

LOCATION AND ACCESS. The area is in the centre of the rugged South Western part of Tasmania and is uninhabited except for Hydro-Electric Commission workers. Over most of the area there are no roads or tracks except ;

1. Along the Northern boundary from the north east corner the Lyell Highway goes about half way and then turns north.
2. In the southeast corner, is the private H.E.C. road connecting the village of Strathgordon.
3. An H.E.C. track traverses about five miles in the North west corner.
4. The walking track to Frenchman's Cap and the old Jane River pack track are located in the Northern part of the area.

TOPOGRAPHY AND VEGETATION. This is an area of high relief with mainly North trending mountain ranges (The highest ,Frenchman's Cap, is 4739 feet above sea level) and deeply incised rivers. All these river systems eventually drain into the Gordon River. The H.E.C. is currently constructing dams on the Gordon and Serpentine Rivers and in a few years, much of the South East part of the E.L. will be under water.

Much of the area is covered by either rain forest or secondary dense scrub interspersed with button grass plains. There is no cultivation and none of the area has been cleared.

GEOLOGY. Most of the E.L. is occupied by Precambrian rocks ; Quartzites, quartz-mica schists, quartz-garnet schists, phyllites and dolomites, all very deformed and usually of high metamorphic grade. Areas of Ordovician and Silurian rocks occur in the North East, North West and one part of the South. In the North East corner are beds of Permian rocks, largely intruded by Jurassic dolerite. Much of the E.L. has been mapped geologically, if sometimes rather superficially, by geologists from the Department of Mines, L.E.E. (Lyell-E.Z.-Explorations) and the Hydro-Electric Commission.

MINERAL PROSPECTS. These highly metamorphosed, contorted Precambrian rocks are not regarded, in Tasmania, as favourable host rocks for mineral deposits. Although riddled by small veins and bunches of quartz, no persistent mineralization has yet been found in them. Despite extensive prospecting in parts of this E.L., no mineralization has been found except for scattered sulphides in some narrow veins in road cuttings on the Lyell Highway some 116 miles from Hobart

Small mineral deposits have been found in Silurian and Ordovician rocks in other parts of the State, but none have been recorded from these rocks here.

The most favourable host rocks, Cambrian, have not been recorded in this E.L.

There is no evidence of the favourable source rocks, Devonian granite or Cambrian ultrabasics.

Gossans have been noted by H.E.C. geologists in the vicinity of View Hill.

High grade dolomites occur over wide areas, but because of their

inaccessibility ,cannot be regarded from a commercial viewpoint.

In the past, there has not been a single prospect recorded in the E.L. The closest production was from a small alluvial goldfield, Jane River Goldfield, which is situated in an enclave of this E.L. but outside its boundary.

PREVIOUS INFORMATION. Most of the Geological reports and maps are of reconnaissance surveys over fairly wide areas and include :

1. Department of Mines Geological Reports.

Report of Journey to Gordon River.	Twelvetrees	1909
Western Exploration	Ward	1909
Country between Low Rocky Point and Fitzgerald	Howard	1927
Country between West Coast Road and Jane River	Finucane & Blake	1933
Jane River Goldfield	Blake	1935
District between Jane River and Prince of Wales Range	Blake	1936
Explanatory Report on St.Clair Quadrangle (Printed)		1965

L.E.E. Reports

Andrew River	1956
Hamilton Range Area	1957
Moore's Lookout-View Hill Area	1957

In the Mines Department, are also available flight sheets of the Geophysical work done for L.E.E.

H.E.C. Mapping

A great deal of geological mapping has also been done in the Southern part and in the North-western part by H.E.C. geologists.

RECOMMENDATIONS.

In my opinion it is not advisable to waste effort in looking for mineral deposits in Precambrian rocks; so that much of the E.L. can be eliminated. Likewise the dolerite in the North-east corner can be discarded.

There is some hope that mineral deposits could be found in the areas of Silurian rocks, although the absence of favourable source makes this unlikely. The E.L. has all been flown with a magnetometer and part of it has been flown using E.M. Few targets were found worth examining on the ground, and those that were proved ~~uninteresting~~ uninteresting. No further geophysical work is recommended.

Geochemical work could be carried out as follows :-

The report of gossans in Silurian rocks near View Hill, suggests that a geochemical survey could be attempted. The district is very remote and would probably have to be serviced by a helicopter.

A reconnaissance survey could be made over the Silurian rocks south of the Lyell Highway.

Generally the E. L. is unfavourable for mineral exploration and if not abandoned, should at least be reduced.

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GEOLOGIST

19.8.70.