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6. LITTLE DEN GOLDFIELD

by V. M. Threader

The Little Den Goldfield was visited on 5th-6th of June 1962 in company of L. Faulkner of Launceston who had previously written to the Department for geological advice.

The Little Den is an alluvial flat on the Lake River; it takes its name from an old homestead in the area.

A good motor road (to Parknook) leads south from the Campbell Town-Cressy road as far as Dabool Rivulet, a distance of some nine miles, then follows about six miles of rough road to Little Den. There is a slightly more direct route through the Connorville Estate by a private road which joins the public road two miles south of Dabool Rivulet.

Gold was reported to have been discovered in this area in 1932 but local residents stated that the discovery had been made 50 years earlier. The land is all privately owned and has been worked for gold intermittently since its discovery. The last permit to enter expired in October 1961. Departmental reports were prepared by Scott (1932; 1935) and Nye and Blake (1933). Voisey (1949) included this area in a report prepared for the Hydro-Electric Commission.

Scott considered that alluvial gold was being won from an old course, now abandoned, of Lake River. At the time of his first visit, Cambrian slate on the east side of the river was being prospected, there being some weakly auriferous quartz veins in it.

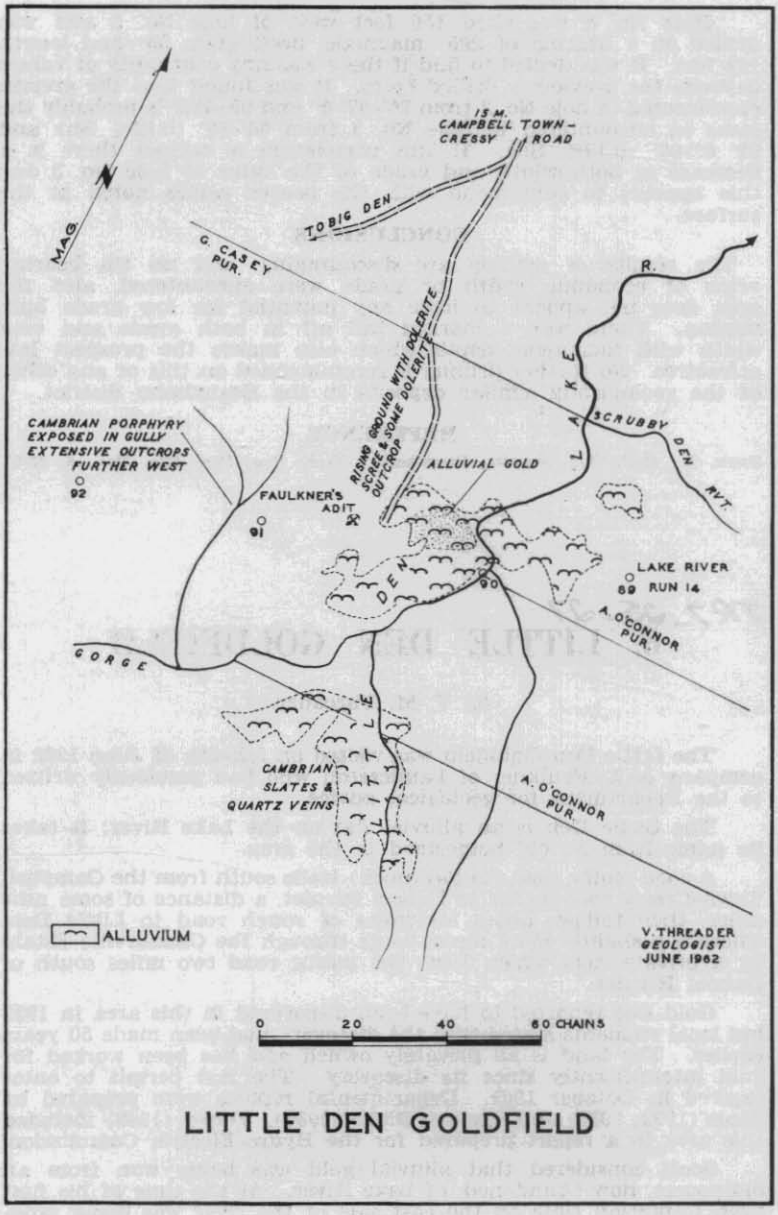
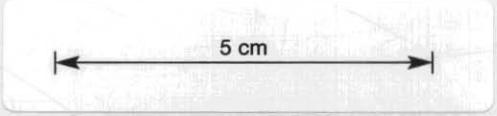

MAG
15 M. CAMPBELL TOWN - CRESSY ROAD
TOBIG DEN
G. CASEY PUR.
R.
LAKE
SCRUBBY DEN RVT.
RISING GROUND WITH DOLERITE SCREE & SOME DOLERITE OUTCROP
ALLUVIAL GOLD
CAMBRIAN PORPHYRY EXPOSED IN GULLY EXTENSIVE OUTCROPS FURTHER WEST
92
FAULKNER'S ADIT
91
DEN
90
LAKE RIVER
89 RUN 14
A. O'CONNOR PUR.
GORGE
LITTLE
CAMBRIAN SLATES & QUARTZ VEINS
A. O'CONNOR PUR.
ALLUVIUM
V. THREADER GEOLOGIST JUNE 1962
0 20 40 60 CHAINS
LITTLE DEN GOLDFIELD

FIGURE 7.


5 cm

Nye and Blake made a thorough investigation and produced a geological map of the area. They described a basic igneous rock as a gabbro porphyrite of Devonian age. As outcrops were found bounding the Little Den, it was assumed to underlie the alluvium of the Den and to be the source rock of the alluvial gold. The report concluded that the field had very limited potential. Scott (1935) recommended a pitting or boring programme to delimit the payable area of alluvial gold and to determine its depth.

Voisey (1949) grouped the porphyries with the Cambrian slate and pyroclastic rocks which occur in the area. If this interpretation is correct, they are host rocks and not source rocks of the gold.

During the present investigation it was observed that these Cambrian rocks were more abundant than is shown on Nye and Blake's map, several additional large outcrops and stream exposures having been seen. On the western edge of the Den alluvial flat there are Jurassic dolerite outcrops and on the slopes there is a mantle of dolerite scree. It was thought that Cambrian rocks underlie much of the scree, but the transgressive nature of the dolerite contact and the presence of scree make it difficult to determine any limits. It is fairly certain though that it dips under the Den alluvium as Nye and Blake concluded. Mr. Faulkner demonstrated the local distribution of the alluvial gold by washing several dishes of the ground. It appears that the gold is coarse, some pieces being the size of grains of wheat, and nuggets over 1 ounce have been reported. Mr. Faulkner stated that he has not found gold deeper than a few inches, the best places being on the surface beneath eucalypt trees where the ground has been slightly raised by root growth. Whether such is the case or not, the gold is of local distribution, shallow depth, coarse grain and irregular shape. These indications all point to a nearby origin. Faulkner and others have prospected on the edge of the alluvial flat and have sunk a small shaft to 10 feet and driven an adit of 10 feet exposing two parallel quartz veins containing visible sulphide mineralization. These appeared to be strong bodies of quartz and samples were taken for assay. It was not possible to determine the nature of the country rock as the workings are still in decomposed ground. Mr. Faulkner was advised to follow these veins along the strike and to attempt to obtain fresher rock by deepening the shaft on the veins. It is possible that these veins or others running parallel to them were the source of the alluvial gold and it was suggested that continuing the adit into the hill could be undertaken when these two veins have been thoroughly prospected.

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