

of the Gordon Limestone in this synclinorium, except for a complexly faulted wedge to the east of the Shepherd and Murphy Mine, which will be dealt with below.

C. MINERAL DEPOSITS:

No Cambrian or Precambrian mineralization is known in the area. All mineralization seems to be Devonian, or insignificant Tertiary placer deposits derived from the Devonian mineralization.

Vein type deposits ('lodes') were the most common type worked in the past. These typically have a quartz gangue and were worked for tin and tungsten, galena and gold. All veins are small; the largest are at the Shepherd and Murphy Mine where they average 20 to 50 cm in width and are up to 400 m long.

The granite and adjacent rocks are greisenized locally and carry uneconomic wolframite and cassiterite values in known areas.

Contact metamorphic and metasomatic deposits are widespread—minor bismuthinite-gold bearing skarn has been worked in the past (at Stormont) but the most significant newly recognized skarns are those containing fluorite.

The regional distribution of mineral deposits will be dealt with in the regional report on E.L. 7/74.

The Shepherd and Murphy Mine, where the fluorite bearing skarns occur, is described in detail below.

D. GEOLOGICAL MAPPING:

Each of the 5 sheets has been geologically mapped at a scale of 1:2500. See plans TAS-76-46, 47, 48; and TAS-77-65, 66.

E. THE SHEPHERD AND MURPHY MINE AREA:

a) General

Detailed geology is shown on plan TAS-76-46; a simplified plan and section are figs 3, 4. The Shepherd and Murphy Mine, located near Bismuth Creek at Moina, has been described by various authors, the most comprehensive being Twelvetrees (1913), Blake (1956), Williams (1957) and Robinson (1957).

The main orebodies worked were four almost vertical east-west trending sub-parallel quartz veins up to 50 cm wide, 400 m long and about 100 m deep. The