The Devonport gold mine, Black Bluff

by D. I. Groves

LOCATION AND ACCESS
The mine is situated approximately 14 miles west of Moina on the western side of the Lea River. It can be reached by a pack track, 5 miles in length, which leaves the road 7 miles from Nietta and extends over the Black Bluff Range. An alternative route is by a 5 mile track directly from Moina, the first 3 miles being accessible by vehicle.

GENERAL GEOLOGY
The mine is situated at the faulted junction of the Roland Conglomerate and Moina Sandstone of Ordovician age. The NNW-trending fault downthrows the sandstone on the eastern side against conglomerate to the west. Henderson (1939) indicated that the strike of both formations is N–S with a steep easterly dip.

ECONOMIC GEOLOGY
Ore deposits
The gold occurs in a series of small lenses of quartz, filling an anastomosing system of fractures, which locally form the fault zone between conglomerate and sandstone. The main quartz veins are sub-parallel to bedding with a slightly shallower dip.

Mine workings
The workings comprise an adit and several trenches. The adit was driven about 135 feet towards the SW, cutting a quartz vein 100 feet from the portal. The vein was driven on for 60 feet towards the SW and proved to be irregular, ill-defined and extremely small. It strikes approximately 340° and dips steeply east. In the southern surface trench, approximately 80 feet above the adit, two poorly defined veins are exposed about 10 feet apart. Both veins strike 325° and dip 75°E, the eastern lode comprising a few inches of quartz in silicified country rock and the western lode predominately ferruginous material.

Gossanous material from the surface, sampled by Henderson (1939), indicated 12 dwt 9 gr Au/ton and 1 dwt 23 gr Ag/ton, while quartz lode from the surface indicated 7 dwt 7 gr Au/ton and 1 dwt 13 gr Ag/ton, and from underground 6 dwt 6 gr Au/ton and 2 dwt 5 gr Ag/ton. These assays suggest a possible enrichment of gold in the ferruginous lodes and decrease in gold values with depth. However, the irregular nature of the veins is the main deterrent to mining the deposits.

PREVIOUS REFERENCES
