1945/70

### COMMONWEALTH OF AUSTRALIA

# DEPARTMENT OF NATIONAL DEVELOPMENT BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS

**RECORDS:** 

1945/70

Workie's Antimony Mine,

Kangaroo Falls

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N.H. Fisher

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### DEPARTMENT OF SUPPLY AND SHIPPING.

### MINERAL RESOURCES SURVEY BRANCH

## Report No. 1945/70.



# WORDIE'S ANTIMONY MINE, KANGAROO FALLS.

This mine, which is also known as The Magword Antimony Mine, is situated about 30 miles easterly from Guyra and is reached by following the main highway easterly from Guyra for 30.5 miles, then turning left and proceeding in a northerly direction through a series of paddocks for 4 miles. The mine is situated down the side of the steep valley of Kangaroo Creek, which becomes a gorge in its lower portion. A road has been constructed from the main camp at the top of the hill for about 1 mile down to the mine, but this is too steep to be trafficable except by specially geared vehicles. Concentrates, 10 cwt. per trip, are carted up in a specially adapted Nash utility.

The mine was not accessible at the time of my visit owing to bad air. The orebody has been worked to a depth of 208 feet. The bottom of the main shaft, which follows the reef down at a steep incline, is 20 feet below the bottom (208')level. In places the shaft is merely an opening through old stopes. An adit has just been commenced from the side of the gorge to connect up with this level. The lode strikes 50 degrees east of north and dips very steeply, at about 80 degrees to the southeast. It varies in width from a stringer to as much as 5 feet in the widest parts, but averages probably about 2 feet. On the bottom level, the lode is said to have a narrower average width, less than 12 inches, and looks somewhat less favourable than elsewhere. The maximum length of the shoot in the main reef is 50 feet.

The ore shoot pitches to the northeast in the same direction as the slope of the side of the gorge. This circumstance renders the ore-body especially adaptable to opening up by adits, but up to the present none has been put in, and all the work done has been carried out from the shaft. The shaft is near the northeast end of the ore shoot at the surface, but on the bottom level the shoot is reported to be 100 feet northeast of the shaft. It is estimated that the adit which has been started to connect with the 208' level will need to be driven about 160 feet to connect with the drive. The outcrop of the lode fissure can easily be traced down the hill as it is less resistant than the surrounding country and forms a slight gully. The adit has been started on the footwall, as this gully also acts as a chute down which material from the surface near the shaft is dumped, and is being driven obliquely to the lode fissure, which it will then follow. Below the adit level, the side of the gorge is very steep and if the shoot persists there would be no difficulty in connecting the shaft to the surface by means of adits. Several hundred feet of backs are available above creek level. A small block of ore remains to be mined above the 208' level, but this will be left on account of bad ventilation until the adit connection is made.

Near the surface at least two parallel reefs have been found close to the main reef. These, however, are smaller and have not been worked to any extent. The country rock is slate of a fairly massive variety, somewhat indurated and in places fractured. Few definite dips were observed, but the general direction of dip appears to be to the southeast at a considerably lower angle than the dip of the reef. Production at the time of inspection was confined to the cleaning up of dumps by hand jigging. The concentrate produced assays from 50 to 55 per cent. antimony. Hand-picked ore from the mine assays 45 to 55 per cent. antimony and is said to average 50 per cent. It apparently carries no gold.

The owners of the mine are Messrs. Wordie, of the Tudor Hotel, Tamworth, and McGuire, who is at present in the Armed Forces. Manager at the mine is Mr. W. Markham.

3rd October, 1945. CANBERRA. A.C.T. N. H. FISHER, Chief Geologist.

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