

TR 5 - 102 - 104

GOLD MINE, NARRAWA CREEK, MOINA

by R. Jack.

LOCATION

The mine is situated on the southern bank of Narrawa Creek approximately two miles east of the old township of Moina, and 35 miles south of Devonport on the Devonport-Cradle Mountain Road.

HISTORY

Gold was first discovered in the area by T. Bessell and C. L. Stewart in 1893, and it is estimated that 1000 ozs. of gold have been recovered since then, both by underground mining and surface sluicing methods. A. H. Higgs commenced mining in 1934, and production was continued intermittently until 1947. Since then the mine has been idle. The area has been known as "Higgs' Mine" and "The Sunrise Mine" and has been reported on by Blakt ⁽¹⁾ 1937, and Keid ⁽²⁾ 1947.

GEOLOGY

The mine is located in the Moina Sandstone and this sandstone is underlain by the Roland Conglomerate which outcrops on the hills to both the north and south of the mine workings. The major structure is therefore a broad syncline approximately one mile across. Within this syncline minor folding occurs and the mine is located on the southern limb of a subsidiary syncline.

The sandstone and conglomerate are of Ordovician age, and to the east of the mine these rocks have been intruded by the Devonian (?) Dolcoath Granite. This granite is the probable source of mineralisation, and it has also metamorphosed some of the more susceptible rocks in the area. The sandstone at the mine is changed to a meta-quartzite and bands of impure dolomitic material in the sandstone have been altered to a greenish skarn rock containing garnet, diopside and quartz. Minor faulting and shearing near the mine are also probably the result of the intrusion.

THE ORE BODIES

The old workings, which are mainly collapsed, consisted of two interconnected adit levels driven N.W.-S.E. in the main orebody. Stoping was started on the lower adit level and worked through the upper adit level to the surface. Three separate ore bodies are known, two of which are narrow, with poor gold values and have not been worked. The major orebody is the most southerly one. This varies in width to ten feet and has been stoped over a length of 50 feet on the lower level increasing to a length of 150 feet at surface. This increase in stope length, together with higher assay values, Keid ⁽²⁾, in the upper levels indicates a very shallow zone of surface enrichment.

The ore occurs in an extensively crushed zone between two well marked shears. These shears have formed channels for the migration of the mineralizing fluids and the porous crushed meta-quartzite between the shears has been the favourable site of deposition of the sulphide mineralisation. The most abundant sulphide present is pyrite, and minor amounts of galena, arsenopyrite and chalcopyrite also occur.

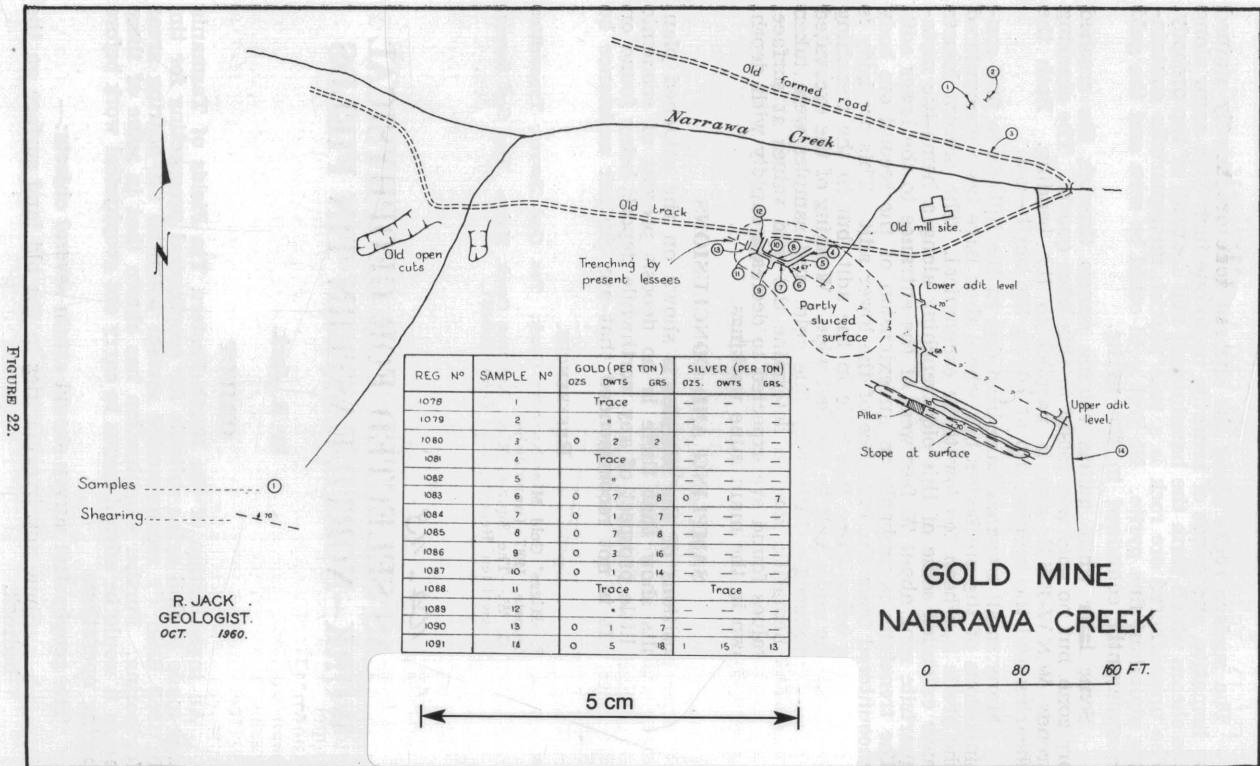


FIGURE 22.

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The surface rocks along the sheared zone are heavily stained by hematite, and bands of hematite up to one inch wide occur along the shears which form the hangingwall and footwall of the orebody. The unweathered ore rock is a pale pinkish metaquartzite containing abundant fine pyrite. No free gold could be seen and the gold is apparently contained in the pyrite.

Some later white quartz veining occurs through the crushed ore zone, but no gold was found in this later quartz. The shearing trends W.N.W.-E.S.E. and is parallel to the bedding. Both the shearing and the bedding dip at 70° to the north-east.

Many small trenches have been dug in the hillside to find continuations of the ore bodies but where they have been encountered the grade has been too low to be economical. The present lessees have extended some of this old trenching along a hematitic metaquartzite zone about 70 feet west of the entrance to the lower adit. The trenching is probably on an extension of the second ore body encountered from the entrance of the lower adit. This ore body is reported as being three feet wide in the adit, but in the trenching it is only one and a half to two feet wide. Washing of the excavated material produced a little very fine gold, and samples were taken across the hematitic zone to determine the gold values at surface. Any gold values found are expected to decrease rapidly with depth, as was shown in the main mine workings.

SAMPLING AND CONCLUSIONS

The positions of the samples is shown on the attached plan. These results show that there is no deposit present of economic value, and little prospect of any worthwhile deposit being found on the lease. It is not recommended that any further assistance be given.

REFERENCES.

- (1) BLAKE, F.—Higgs' Gold Mine-Narrawa Creek. *Tas. Geol. Survey*; Typewritten Reports, 1937 (unpublished).
- (2) KEID, H. G. W.—The Sunrise Mine, Narrawa Creek, Moina. *Tas. Geol. Survey*; Typewritten Reports, 1947 (unpublished).