# MEMOIRS 1973





Jackson, P. 1973 "Notes on Sygun Mine" NCMRS, Memoirs Vol.2 No.3, pp.149-150

Published by the

THE NORTHERN CAVERN & MINE RESEARCH SOCIETY SKIPTON U.K.

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#### NOTES ON SYGUN MINE

### P. Jackson

Sygun mine lies about I½ km ENE of Beddgelert in Caernarvonshire on the north-western slopes of Moel y Dyniewyd. The position is centred on NGR SH606486.

The mine site lies on a steep rocky hillside with numerous small crags and scree slopes interspersed with grass and bracken. A group of veins run along the face of the crags in a north to south direction with one vein being traceable £or over 400m. In addition, there are several 'cross veins' with bearings of between 115 and 140 degrees from north.

As deduced from the dumps and existing vein outcrops, the principal vein material was quartz with chalcopyrite and pyrite.

Close to the base of the hillside are the foundations of a small dressing mill built on five levels down the hillside with the remains of settling ponds on the valley floor. South of the mill is the entrance to the lowest adit level (No.1 on map) with a well grassed dump. This level was not enterable at the time of the visit as it contained water about 1.75m deep. It is apparent that there have been tramways from the mill in both northeast and southwest directions The southwest line follows the hillside for about 150m to the entrance of an adit level (No 2), while the northeast line runs for about 200m to within 50m of an opencast working. It is obvious that the line was intended to reach the opencut, but was never completed. This opencut is of comparatively recent age as the wallrocks are less weathered than the other opencast workings on the site. Two north-south running veins, and one cross vein, may be seen, all carrying minor amounts of chalcopyrite. Underground workings here are confined to an ad it level (No 3) 15m long to a forehead, following the cross vein.

To the east of the opencast and up the hillside is a further opencast working at the intersection of the cross vein just mentioned and a major north-south vein. This has been worked to the south in opencast of considerable size, and various adit levels, which are shown on the map.

Number four level runs southeast for 24m to a forehead, with a hopper 19m from the entrance. The level is a crosscut to the main North-south vein and the hopper lies below an opencast working. Number five level is a crosscut 46m south east to a forehead with

#### NOTES ON SYGUN MINE

no obvious signs of mineralisation. The remaining group of adits are all related to the main north-south vein, and its associated parallel veins, and a major cross vein which has apparently carried considerable mineralisation. The relationship of these workings are shown on the map and points of interest include a surface chute from the top of No 8 level dump down to the entrance of No.7 level from which a tramway ran into a neighbouring opencast where ore was presumably tipped down into No 6 level. Number 6 level runs for 25m southeast to a forehead, with a hopper at 8m from the forehead. A loop level by-passes the hopper on the east side and at each end of the loop are short drifts, the northerly one going west for about lm and the southerly one running east for 1m.

At the end of the large opencast on a cross vein is found No 8 level which runs ESE for 18m to a forehead. Immediately up the mountainside is No 9 level which runs for 42m to a forehead, again in an ESE direction.

It is said<sup>1</sup> that copper was being worked at Sygun before the middle of the 16th century, but the main period of activity was apparently in the 19th century. The mine produced 909 tons of copper ore between 1825 and 1847, 50 tons in 1869-70 and 410 tons in 1903.<sup>2</sup> There is also a reference to the mine in 1851 under the name of Hafod y Llan.<sup>3</sup>

The recorded production of 1369 tons of copper ore must have been obtained mainly from the opencast workings which represent by far the greatest proportion of the excavation.

# Acknowledgements

The fieldwork for these notes was carried out with R. Jackson and S.H. Jackson. I am indebted to J.R. Foster-Smith of Middleton in Teesdale for drawing my attention to the historical references.

# References

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- (3) Mining Journal, 29th November 1851.

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