

REPORT ON J.J. GOODALL'S PROSPECTING AREA.Storeys Creek.

This prospecting area is situated about 45 chains to the south-east of the Storeys Creek mine. It occupies portion of the flat-topped ridge between Storeys Creek and Aberfoyle Creek. Cambro-Ordovician quartzites and slates occupy the whole of the area. These rocks have a general strike of 335 degrees and a dip of 60 to 80 degrees to the west. Recently Mr. Goodall has been excavating a number of shallow holes on the south-eastern part of the area. These are arranged in a general lineal direction which continues through a number of old excavations on the north-western part of the area. These holes are generally spaced one half to one chain apart but sometimes five chains along a length of several hundred yards. Abundant cassiterite occurred in the detrital material at the surface where these holes were dug. As the holes were deepened it was found that narrow veins of sandy or sandy and clayey material impregnated with cassiterite persisted to shallow depths. These veins have a footwall of hard dark quartzite with a dip of 70 degrees to the west. A hanging-wall is sometimes present and if so, it is more vertical than the footwall and meets the latter at shallow depths. The veins also pitch to the north-west. In every case the veins pinch out along the dip and pitch against the hard quartzites though often a track continues in depth on the footwall.

The material filling the veins is sandy or mixed sandy and clayey material referred to above. It contains abundant cassiterite showing numerous crystal faces. These crystals show no sign of attrition and appear to occur in the place where they were formed. Occasionally a very narrow vein of white quartz containing cassiterite occurs in association with the quartzite forming the footwall. It would appear therefore that the soft material represents original lode material or else lode material altered in place.

These occurrences are arranged in a lineal direction with a bearing of 305 to 315 degrees. So far no exposure shows any channel connecting them, although such might be expected from their arrangement. It is to be noted that the direction of the individual shoots of ore conform to the bedding planes of the strata. It would appear that the occurrences represent a number of veins of the above nature arranged en echelon and that the lineal arrangement is more or less accidental. The different occurrences do not appear to represent parts of one continuous lode.

As regards extension in depth it may be stated that the majority of the veins pinch out to nothing or a mere track at depths down to 6 feet. At one place only has any attempt been made to test them at greater depth. In this case the hard quartzite underfoot was removed and another small shoot of the soft material was exposed. This in turn pinched out as in the case of those at the surface. Thus while similar small but rich shoots may be found in depth, it becomes a question depending entirely on the small size and value of the shoots and their frequency of occurrence, as to whether they can be economically sought and mined.

P. B. Nye.
GOVERNMENT GEOLOGIST.

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