

NOTES ON TIN BEARING QUARTZ LODES.MT. MURCHISON DISTRICT.

Acting on instructions when recently in the Mt. Murchison district, a brief examination was made of the above. As a result the following notes are appended:-

The formations outcrop in the low lying button grass country in Stirling Valley about $1\frac{1}{2}$ to 2 miles north of the Stirling Valley Mine. The general strike of the formations is a few degrees to the east of north.

The route of the wooden tramway connecting Stirling Valley with the township of Tullah is in close proximity to the outcrops.

The area on which they occur is unoccupied Crown land.

For a distance exceeding over half a mile in length these outcrops can be traced along the low wide ridges which rise a few feet above the general level of the plain.

The country rock consists of slate which is traversed by narrow bands of porphyroid.

In a number of places trenches have been cut across the formations disclosing the ore to a depth of a few feet below the surface. They consist chiefly of quartz with which is associated in varying quantities iron, copper and arsenical pyrites, the proportion of the former being much greater than that of the other minerals.

There is not sufficient copper pyrites in the ore to render it of any commercial value.

Analysis of samples taken from ore exposed in the trenches proved that small quantities of tin are present. Three indicator samples taken by the writer from various points where trenches have been cut, assayed at the Mines Department Laboratory, Launceston, gave the following results:-

	Tin %	Arsenic %
No. 1 Sample from dump heap at Trench.	0.43	7.65
No. 2 Across lode formation 5 ft. wide.	0.67	5.76
No. 3 Outcrop of lode	Trace	2.42

Nos. 1 and 2 consisted chiefly of iron pyrites No. 3 sample being quartz through which a little pyrite was disseminated.

The amount of work carried out in the way of development along the line of the outcrops is insufficient to prove their extent or to enable representative samples to be taken.

Large quantities of quartz representing the outcrops are practically barren and from general observations made it is conclusively apparent that only those portions of the lodes carrying a high proportion of pyrites are likely to be

of any commercial value. Any further prospecting work should therefore be confined to those parts where pyrites is most abundant.

The formations are essentially low grade in tin, and there are no indications in the outcrops to suggest that enrichments are likely to occur. In a few places detrital material in the neighbourhood of the outcrops has been tested for tin with apparently discouraging results.

From the general character of the lodes, position, and other features, it must be concluded that to be of any commercial value very large continuous bodies of stone would need to be available which could be mined at a medium of cost.

These lodes traverse low lying country which does not offer facilities for cheap methods of mining, consequently, unless comparatively high grade ore is located in sufficient quantity by surface prospecting to warrant developmental work by shaft sinking to explore them at depth, the prospects are not sufficiently encouraging to justify any comprehensive scheme of development.

J. B. Scott

STATE MINING ENGINEER.

Mines Department,
HOBART.

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