

NOTES ON MINERAL LEASES Nos. 10119/M, 20 acres,
10118/M, 20 acres; 10117/M, 22 acres,
10115/M, 20 acres.

CHARTED IN THE NAMES OF ROBINSON & BONNER, RATTLER
HILL, WELDBOROUGH.

LOCATION AND ACCESS

Rattler Hill is portion of an elevated area of country lying about $3\frac{1}{2}$ miles to the south west of the township of Weldborough, North-East Tasmania.

It can be reached by the Weldborough-Ringarooma road which passes along the northern slope of the hill. The first portion of the road is in very good condition and suitable for motor traffic. Sections of a mile or more out from Weldborough are rough, the surface being strewn with large sized stones.

A foot track which takes a south westerly course from the road leads to the sections, the distance being about $1\frac{1}{2}$ miles, the turn off from the road is where Minnie Jessup Creek crosses the latter.

A very fair graded road could be constructed from a point further on, then following the valley of the Cascade River in a southerly direction. A distance of about a mile from the road would reach on to the leases.

TOPOGRAPHY

The area lies at an elevation of about 2,000 feet above sea level. The main group of the leases, comprising 85 acres, are situated on the western slope of the range of hills a short distance to the east of the head waters of Cascade River. A small tributary stream called Done Again Creek flows westerly through the centre of the group of leases joining Cascade River a short distance from the western boundary of Section 10117/M.

The lodes occurring on the property traverse the sections from the lowest to the highest points on the leases, thus affording good facilities for prospecting and development work by tunnelling along the strike of the ore bodies.

The surface until recent years was covered with dense myrtle forest, very few of the trees are left standing, the area having been swept by a succession of bush fires. The area is now valuable for pastoral purposes, excepting in the winter months.

Section 10115/M is situated on the opposite or western side of Cascade River to the main group of leases.

ECONOMIC GEOLOGY

The country rock consists of granite which is traversed by a series of well defined tin bearing quartz greisen lodes. These lodes can be traced in an unbroken line over considerable distances. They vary in character, some of them being hard silicified stone, others of a porous nature. The tin oxide occurs in both coarse crystals and in a fine state of division. Where exposed at the surface by trenching and in the bare outcrops, tin is visible in the stone.

The respective lode outcrops vary in width from 6 to 20 feet or more, they also vary in strike from north-east to north-west.

There is evidence of a good deal of activity in past years in working the shallow surfacing material for alluvial tin over a large area, indicating that through erosion of the lode outcrops a considerable distribution of tin has occurred.

There is little doubt that much of tin worked for many miles along and adjacent to the banks of the Cascade River, as well as that contained in the deep leads in the lower lying country, has been derived from the Rattler Hill area and country in the vicinity.

PROSPECTING AND DEVELOPMENT

The small amount of work carried out on the area has little more than demonstrated the occurrence of tin bearing lodes on the property.

The most important of these is probably that occurring on the most northerly section near the old Star of Peace shaft workings, close to the boundary of the lease.

A strong body of stone is exposed on the surface, it is 12 feet wide, striking N. 40° E., dipping westerly at an angle of 10°. A shaft has been sunk for the purpose of prospecting the lode, but no data is available of the results obtained.

The shaft is full of water and partly fallen in from the surface, making it quite inaccessible. A short distance over the boundary on the adjoining section is another shaft sunk to a similar depth. It is said that very good grade tin stone was obtained from the shaft workings. There is evidence of heap roasting the stone - which here contains small quantities of copper pyrites - for the purpose of dollying it for the tin it contained.

A sample taken from across the bare outcrop in the vicinity of the shaft assayed at the Mines Department Laboratory, Launceston, assayed 0.63 per cent. metallic tin. This lode can be traced along the surface to the lower lying ground towards the Cascade River. Facilities of developing by tunnelling along its course are very favourable. About 15 chains south of shaft workings, another lode is exposed in shallow workings under the shaft.

This lode is striking S. 70° E. and consists of banded siliceous stone. It is from 6 to 8 feet wide and is said to have yielded from the small shaft a large quantity of high grade tin stone, which was dollyed and dressed to a marketable product. The shaft was not accessible, hence an examination of the bottom of it was not practicable. The lode is well defined, and from its general appearance fully warrants developmental work. This opening is situated at a much relatively lower position than the shaft workings.

Further west some chains distant on the lower ground towards the valley of Cascade River, a siliceous lode is uncovered by an old trench. The apparent strike of this lode is due east; but there is not sufficient work done to definitely establish its true direction of strike. It appears to be about 8 feet in width. A representative sample chipped from over the outcrop assayed 0.43 per cent metallic tin. This lode appears to be a strong body of stone. It is very siliceous and is free from any heavy associated mineral. The stone breaks with a well developed conchoidal fracture.

It is very evident that the tin stone occurring in this class of lode formation is unevenly distributed. Wherever an enriched portion has been located it has been removed for dollying purposes by prospectors. Only those parts that would pay for removal and treatment by this primitive method have been mined, leaving the poorer stone exposed. The rich parts have been followed so long as it was economically possible to do so.

On the western side of the Cascade River on Section 10115/M three shafts have been sunk. The two northerly ones are fairly close together and are 12 and 20 feet deep respectively. About 5 chains south of these the other one has been sunk to a depth of 80 to 90 feet on a lode formation. Quantities of very high tin stone are said to have been obtained when sinking operations were in progress. The stone is of a porous or cellular character and is easily crushed.

The better quality of stone said to have been obtained from the shaft workings and has been removed for dollying purposes.

In the early days of exploration in the district a stamp battery was erected to crush ore from lodes in this area. Information concerning the project is very meagre. From the appearance of the site it would seem that the plant was not completed; there are no indications of any crushing or ore treatment being carried out.

CONCLUSION

The writer's examination of the property was made on 7th inst. and was very brief and under unpropitious weather conditions. The evidence as disclosed in the old workings and surface outcrops is sufficient to conclude that the various ore-bodies fully justify development by prospecting in the first instance the surface outcrops; and taking frequent samples from these at regularly spaced distances along them.

By this means sufficient information would be obtained to serve as a guide for a more comprehensive method of development by tunnelling or boring if the preliminary work was encouraging enough to warrant it. The lodes are comparatively large and well defined and cover a wide area of country.

The facilities for working and natural conditions in the way of water supply, provision for storage, etc. are very favourable.

J. B. Scott
STATE MINING ENGINEER.

Mines Department,
Hobart.

20th November, 1928.