

TR 7-18-21

3. NOTES ON THOMPSON'S LODE, MT. BISCHOFF

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LOCATION AND ACCESS

Thompson's Lode is situated in the SW flank of Mt Bischoff, the old surface workings immediately adjoining the Silver Cliff road to the west.

Access to the present workings is by a branch track leaving the Silver Cliff road approximately 100 yards westerly of the junction of the latter with the North Valley road, distant $\frac{1}{2}$ mile north of Waratah townsite. The access track is steep and impassable after rains.

The mine was inspected on 27th-28th February, 1962, and samples from the mine were submitted to the Chief Metallurgist, Launceston, for metallurgical research. A sketch plan of the workings based on a compass and tape traverse accompanies this report (Figure 4). No effort was made to carry out a full geological mapping programme.

GEOLOGY AND MINERALIZATION

A comprehensive report on the Mt Bischoff district was given by Reid (1923) with particulars of the operating mines and respective ore bodies.

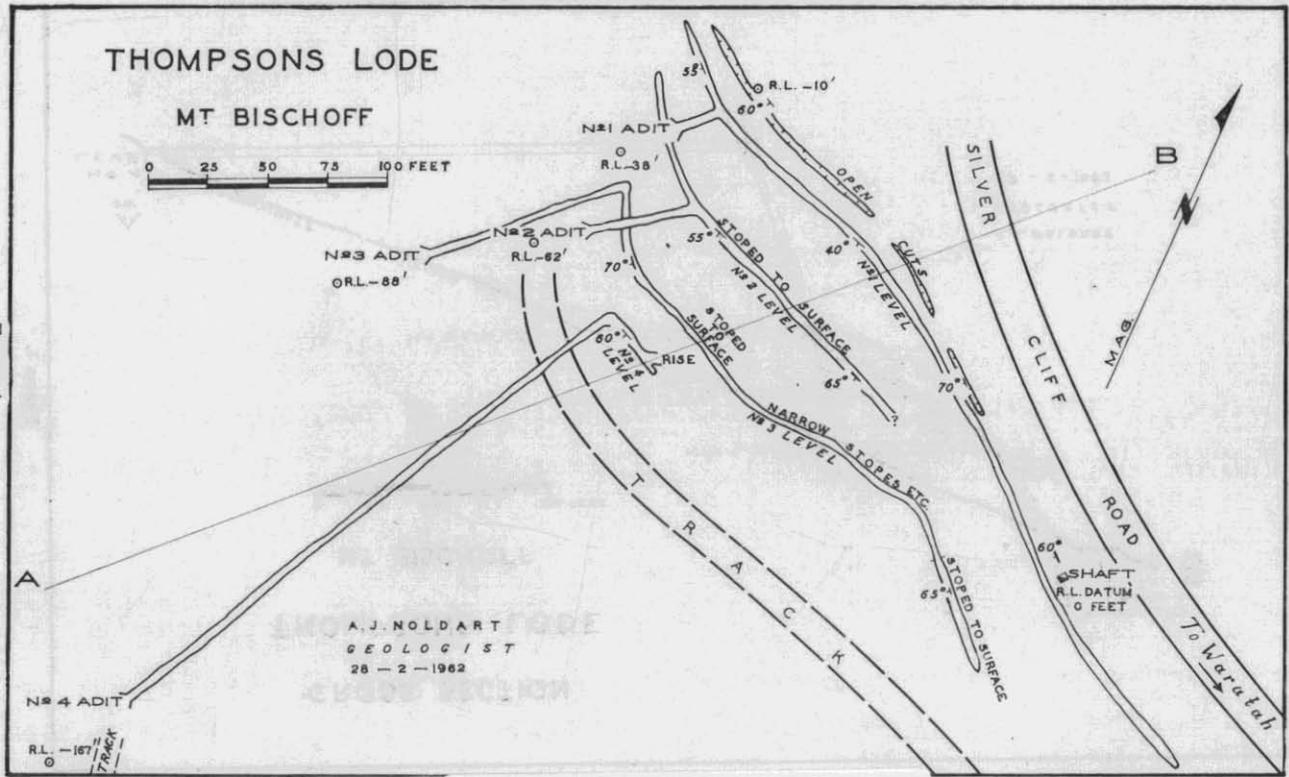
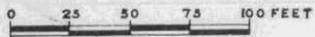
In the immediate vicinity of Thompson's Lode the country rocks are slate of Reid's "*Bischoff Series*". They are pyritiferous in part and have been subjected to considerable faulting of pre-ore age, giving rise to fissures and brecciated zones favourable to the introduction of stanniferous solutions.

Both hanging and foot walls of the ore channel are generally well defined and sharp changes of attitude are common, being most pronounced on the hanging wall. The resultant ore channel shows considerable variation in width which, in conjunction with the rapid lensing characteristic of fissure bodies and the presence of brecciated zones, has given rise to the formation of a succession of semi-tabular ore bodies extremely variable in size and grade.

In the upper levels development to the south was terminated when strongly pyritic zones were encountered with a corresponding drop in ore grade. The ore channel varies from an inch to 12 inches in width in general but pockets up to 8 feet in width were reported in the upper levels.

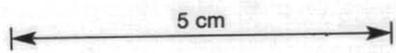
THOMPSONS LODE

MT BISCHOFF



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FIGURE 4.

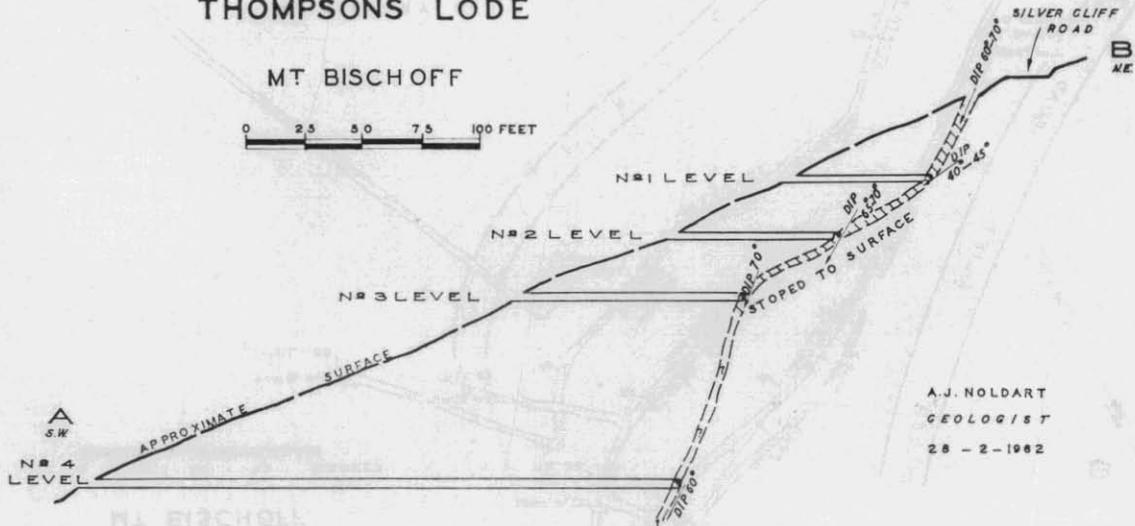


5 cm

CROSS SECTION THOMPSONS LODE

MT BISCHOFF

0 2.5 5.0 7.5 100 FEET



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FIGURE 5.

Mineralization is of the cassiterite-quartz vein type common to the district. Fluorite, siderite, sphalerite and pyrite are present in quantity together with smaller amounts of chalcopyrite, galena and tourmaline. Occurrences of topaz (topazization of quartz), wolfram, arsenowrite and bismuthinite have been recorded from similar deposits in the vicinity but were not identified in the hand specimen.

THE MINE

(See Figure 5)

The mine consists of four levels, each developed from adits. Virtually all payable ore has been extracted above the No. 3 level. Nos. 1 and 2 levels have been stoped over their entire lengths (370 feet and 250+ feet respectively), whilst No. 3 level (length 270 feet) has been wholly stoped over approximately 100 feet of its length. The mineralization on this level was patchy and several pillars of uneconomic width and grade have been left, the major work being confined to three main stope lengths.

Present activities centre on the No. 4 level. Subsequent to the extraction of the ore in the three upper levels No. 4 adit was completed but, on encountering an uneconomic section of the ore channel, all operations on this lode lapsed for a period of several years. The present tributors recently reopened the newer workings and are developing and exploring southerly along the ore channel. A rise is at present in progress to connect with the No. 3 level.

FINDINGS AND RECOMMENDATIONS

1. The most recent (No. 4 level) adit intersected the ore channel at a point unfavourable for mineralization although the channel at this point is quite strong.
2. The intersection appears to have been near the northern limit of the main ore body and development should be to the south. Operations to date indicate a mineralization pattern similar to that in the upper levels. Mineralization encountered in the rise should be of economic grade and size.
3. Weakening of the ore grade can be expected with depth and it is probable that the ore body on this level will not be as strong or extensive as in the upper two levels but a block of potential ore up to 100 feet in length could be expected.
4. Due to the decrease in grade with depth the ore shoots at this level will tend to be smaller and more erratic than hitherto.
5. Only the one overall main ore body has been mined on this lode and little or no exploration has been carried out along the strike of the ore body. Exploration is recommended (finances permitting) southerly along No. 3 level by means of a series of short lateral diamond drill holes inclined to the east. Fifty feet spacings and approximately 150 feet depths should give sufficient coverage for preliminary operations.
6. No further development below the No. 4 level is recommended at this stage. Development of this nature will be entirely dependent on the size, grade and continuity of the ore body between the Nos. 3 and 4 levels.

REFERENCE

- REID, A. M., 1923.—The Silver-lead deposits of the Waratah district. *Bull. Geol. Surv. Tas.*, 33.