

## ANTIMONY MINERALS IN TASMANIA

### INTRODUCTION

No stibnite deposits of importance have been found in Tasmania. The mineral was present in small amounts in certain of the quartz reefs at Lefroy. It is also reported as occurring in very limited quantity near Mt. Claude; in schist at Port Davey; as a lode near Lynchford; and as a diminutive vein at Rosebery.

Reward claims for antimony were granted in the past at Port Davey and Lynchford.

Antimonial sulphides of lead, copper etc. occur in some of the lead and copper deposits of the West Coast.

### STIBNITE DEPOSITS

Port Davey : The reward claims and deposit occur on the ~~western~~ <sup>eastern</sup> side of Long Bay - the estuary of the Spring River.

I examined the locality in 1927, but could find only one small open cut. The rocks near the cut are quartz schists striking at  $31^{\circ}$ , but on the beach, dark micaceous schists strike at  $116^{\circ}$ .

The open cut is 3 to 4 feet wide and 12 feet long. No stibnite is visible in the bottom, but at the face, stibnite is present over a width of 3 to 4 inches and occurs against a wall striking at  $338^{\circ}$ , and dipping to the south-west. A quartz vein occurs to the east of the stibnite. A soft formation near the wall turns and strikes at  $56^{\circ}$ , and has a width of 3 to 5 inches. For about 3 feet along its course, a small amount of stibnite occurs above and below it. The formation is a soft laminated material and two narrow formations appear to branch from it (one on each side) and to strike at  $338^{\circ}$ .

It is stated that a parcel of antimony ore was obtained from this locality, but there is no official record of it. If such a parcel were produced, there must have been a much greater amount of stibnite in the cut than that which appears in the face.

Lynchford : The reward claim is situated on Hall's Creek near Rinadeena on the Mount Lyell - Regatta Point railway. There is no geological report or other information on any deposit on the claim and there has been no production. The absence of a report suggests that the deposit is of no importance, but this cannot be regarded as conclusive evidence. The fact that a reward claim was granted, only means that an antimony mineral was found and was irrespective of the amount of the mineral present.

### STIBNITE IN LODES OF OTHER METALS AND MINERALS

Lefroy : As stated above, stibnite occurred in some of the quartz reefs at Lefroy, particularly in the Orlando mine. It was present as massive and irregular bodies, but not in workable quantity.

Mt. Claude : In the more recent reports, no mention is made of stibnite and the original occurrence must have been of mineralogical interest rather than of commercial importance.

### ANTIMONIAL SULPHIDES

The principal antimonial sulphides occurring in Tasmania are jamesonite ( $2\text{PbS} \cdot \text{Sb}_2\text{S}_3$ ), bournonite ( $3\text{Cu}_2, \text{Pb} \cdot \text{S} \cdot \text{Sb}_2\text{S}_3$ ) tetrahedrite ( $4\text{Cu}_2\text{S} \cdot \text{Sb}_2\text{S}_3$ ).

Jamesonite : Jamesonite is present in many of the lead and zinc-lead lodes of Tasmania and particularly in such fields as Rosebery, Mr. Read, North-East Dundas and Zeehan.

Apart from the North-East Dundas field, the amounts of the mineral are too small to be of economic importance. In the Dundas field, however, there are at least two lodes of jamesonite, which appear to offer possibilities of exploration (descriptions are given in Bulletin No. 36 p. 84 and 85).

Bournonite : Bournonite is present in the lead lodes of Zeehan and zinc-lead lodes of Rosebery, but not in commercial quantities.

Tetrahedrite : Tetrahedrite is present in the zinc-lead lodes of Rosebery, in the North-east Dundas field, in the Zeehan field, and in the Mount Lyell field. In general, the amounts in the lodes were small. At North-East Dundas, the amounts in some of the lodes appeared to be greater, and the mineral carried high silver contents.

### CONCLUSIONS

Tasmania has only a few small deposits of stibnite and as far as is known, these are of no commercial importance. It might be advisable to have the Lynchford deposit examined to obtain information on same, as there is none in the office.

There is little stibnite associated with lodes of other metals and minerals.

Antimonial sulphides occur in the West Coast fields. The only lodes offering possibilities of exploration are two lodes of jamesonite in the North-East Dundas fields. The jamesonite might be used for the production of antimonial lead but I cannot find descriptions of any such use, though such a process might have been developed in recent years.

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4th September, 1941.