

LEASE NO. 11708M - ZEEHAN - W.F. THOMAS

This lease, of 50 acres, lies one mile due west of the Zeehan Railway Station, on the western flank of the Argent Flat. It includes portions of the old Queen Extended, Argent, State Argent and No. 6 Argent Leases. The central portion of the lease is occupied by Warren Hill rising to 300 feet above the Argent Flat. Conical Hill lies to the south just outside the lease boundary. The area is comparatively open being covered with low fern and some scrub. It is easily reached by vehicle from Zeehan.

The workings consisting of Warren Adit, Inglis Adit, the Main Workings and the Opencut have been sufficiently described in a report by Mr. H.C.W. Keid dated 11th January, 1943. As Mr. Keid states, the greater part of this developmental work was done by the previous holders of the area with but slight extensions carried out by Mr. Thomas. The winze in the main workings which was full of water at the time of Mr. Keid's visit was in the same condition at the time of the present inspection. The waterwheel which was used to pump the winze has been dismantled and it appears to have been in this condition for several years. All the portions of the workings which have been described by Mr. Keid were identified during the present visit and no further work appears to have been done on them during the past seven years. It is possible that more work has been done on the winze in the main workings but this could not be determined. The spoil heap at the mouth of the adit does not reveal fresh material.

The only new developmental work on the lease appears to be a shaft located 200 feet south of the main workings adit. This shaft is full of water and could not be inspected. This is undoubtedly the new shaft mentioned by Mr. Thomas in his letter to the Prime Minister's Department. The spoil heap shows brown slates with a little fine black slate. No metal of any kind occurs in the heap.

Geologically the area consists of brown slates rather schisted, fine grained black slates and some quartzites. These rocks strike N. 20°W and dip to the east at about 70°. There appears to be little variation from the above figures which may be taken as characteristic of the rocks as a whole. The three lodes mentioned by Mr. Keid all strike in an easterly direction i.e. roughly at right angles to the strike of the country rocks. This is normal in the Zeehan area. It is assumed, therefore, that the "two little leader veins of galena" mentioned by Mr. Thomas will also strike in an easterly direction.

With the exception of a thin band of pyrite exposed in a cut some 50 feet north of the new shaft, no other signs of mineralisation appear on the lease.

Summarising, then, it may be stated that, in the past seven years since the last examination of the lease was made by an officer of the Department of Mines, the only developmental work which has been done on the lease is the sinking of 20 feet of shaft, and that the only discovery which has been made consists of two little leader veins of galena. For this there is only the statement of Mr. Thomas to go on.

There appears, therefore, to be no reason for revising the conclusions expressed by Mr. Keid in

1943 that "It is considered that the operations of the various companies which originally worked the area have thoroughly tested that its possibilities and that their operations have extended to the limits of the productive ore bodies. Recent operations have been guided by the use of the Divining Rod and although many positions have been tested by shallow workings all have failed to reveal the ore bodies believed to exist".

There is no reason for disbelieving the statement by Mr. Thomas that one of his leader veins assayed 118 oz. of silver per ton and the other 162.9 oz. of silver and 62 per cent of lead. Samples which would give assay results similar and better than the above can be obtained in many places in and around Zeehan township. The questions of how much work is required and how much mining to be done to obtain a ton of such material, and of how many tons of such material occur in a given area are ones which the prospector never raises. They are, however, the important questions and, in the case under review, it is the opinion of the present writer that the area is economically unworkable.

It is stressed, finally, that the above conclusions have been reached on general grounds and on the reported statements of the Leasee, while the two little leader veins have not actually been observed in the field. It is suggested, therefore, that when Mr. Thomas returns to Zeehan and unwaters his shaft, a further visit be paid to the area, and that samples be taken of the lode under Mines Department supervision and assayed by the Mines Department Laboratory.

B.L. TAYLOR

GEOLOGIST

21st July, 1950.

The Director of Mines,
HOBART.