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LEASE 11866/M

(SOUTHERN PORTION OF WESTERN PINNACLE)

INTRODUCTION -

Lease 11866/M is situated in the Upper Scamander district and at the head of the main branch of Fitzgerald Creek. It was held by A. Ryan but is now forfeited. Access is gained from the St. Marys - St. Helens road. The Upper Scamander road leaves the above road at a point about one mile south of Scamander. From a point on the Upper Scamander road about 4¼ miles from the St. Marys road, a branch road trends northerly to the Oriaco copper mines on Eastern Creek, after crossing the Scamander River by means of a bridge. From a point about half a mile north of the bridge, a cart track runs to the north-west. From a point about 1¾ miles along this cart track, a foot track trends northerly, and at a point about half a mile along it, a branch track leads westerly into the workings on 11866/M.

The Western Pinnacle mine workings were of limited extent and were conducted in a search for tin ore. The workings under review in this report occur to the south of the old Western Pinnacle workings and were also carried out in search for tin ore.

PREVIOUS LITERATURE AND HISTORY -

G.A. Waller in his report in 1901 on the Scamander River Field made no reference to the tin deposits in the Upper Scamander district and it would appear that the tin deposits around Western Pinnacle were not known at that time.

Reference is made to the Western Pinnacle mine in the following reports :-

Twelvetrees W.H. - The Scamander Mineral District. Tas.Geo.Surv.Bull. No. 9 - 1911 (Printed)

Reid A, McIntosh - Preliminary Report on Western Pinnacle Prospect, Upper Scamander - 17/10/27 (Typewritten)

Scott, J.B. - Report on Mineral Lease 10221/M - 80 acres, charted in the name of R. Hynds, Western Pinnacle Mine - 19/11/28 (Typewritten)

GEOLOGY -

The lease is occupied by slates, quartzites, etc., of the Cambro-Ordovician system of north-eastern Tasmania. Slate predominates on this lease and quartzites are present in subordinate amounts. The rocks strike at 325° to 340° and dip at very high angles. The system is highly folded but it was not possible to determine the fold axes because of the very high dips of the beds.

ECONOMIC GEOLOGY -

The mineral deposits on this lease are tin deposits. An examination of the workings showed that in most cases, the deposits consisted of narrow veinlets of quartz etc., striking at right angles to that of the country rocks. Such veins, therefore, strike east-north-easterly and have almost vertical dips. The veins consist mainly of quartz, and, in places, contain cassiterite and small amounts of sulphide minerals. In the small cut in the eastern bank of Fitzgerald Creek, there is a seam of chalcopyrite. In a few places, the quartzite contained narrow quartz veins but such veins did not appear to contain cassiterite.

From the descritpion of Reid and Scott, it would appear that the deposits worked to the north have the same characteristic structure, viz., cross veins in certain bands of rock.

THE WORKINGS AND LODES -

The main workings are situated in the south-western portion of the lease and on both sides of Fitzgerald Creek. A low cliff on the western side of the creek exposed two formations of quartzite containing narrow quartz veins apparently without cassiterite. At the eastern end of the cliff, a small amount of work has been conducted but no cassiterite or sulphide minerals could be seen. This work is situated close to any north-western extension of the rocks from the cut on the eastern side of the creek.

The small cut situated a few feet to the east of Fitzgerald Creek has exposed a width of 75 inches of quartzites. Near the face, a very narrow seam of chalcopyrite crosses a portion of the roof of the cut. Further from the face, a wider seam of chalcopyrite exists on the north-eastern side of the cut. The material on the dump shows seams of chalcopyrite and pyrite and also a small amount of quartz containing cassiterite. A sample was taken across 66 inches of the face and consisted wholly of quartzites without any seams of quartz or chalcopyrite. On assay, the sample gave a result of a trace of tin.

About 150 feet to the south-south-east, there is a small face showing a veinlet of quartz with coarse-grained cassiterite.

Between 20 feet and 50 feet north-east from the above small face, an irregular open cut has been made along the hillside. Between the last two cuts, the rocks consist of interbedded quartzites and slates with a high dip to the north-east. Some of the rocks appear to be somewhat silicified and banded slates. The north-eastern part of the cut has a length of 15 feet to 20 feet. It contains narrow cross veinlets of quartz with coarse-grained cassiterite. A sample was taken across 6 feet of the face. The sample did not contain any veins of quartz, but contained some limonite which occurs in horizontal joints in the rocks. On assay, the sample yielded only a trace of tin.

In the south-eastern portion of the lease, a shallow pit had been dug. The pit has exposed quartzites and slates with a general strike of 330° and a high dip to the west. The material on the dump showed some quartzite

with quartz veins and crystalline quartz lining vughs. Staining of the dump material suggested the presence of some arsenopyrite but neither arsenopyrite or cassiterite was visible in the material. Similar material does not appear to occur in the sides of the pit and it is impossible to state from which portion of the pit the quartz and veined material was obtained. Any formation present in this pit would be totally different from those cut in the workings near Fitzgerald Creek.

About 50 feet to the south-east of the pit, and outside the lease boundary, there is an old shallow excavation showing iron-stained and silicified quartzites.

CONCLUSION -

The workings on this lease are of very limited extent and for the most part have been cut where the country rocks (slates and quartzites) outcrop prominently. The workings have exposed zones of slates and quartzites striking between 320° to 340° and with high dips. The tin deposits occur in these zones, but have strikes at right angles to those of the zones. The deposits consist of very narrow (up to ¼ inch or ½ inch) quartz veins with cassiterite, chalcopyrite and pyrite. Although the material in the veins might represent tin ore of a satisfactory grade, the veins are very narrow and short and are spaced at such wide intervals that it would be impossible to conduct profitable mining operations on them or on the bands of rocks containing them. Two samples taken from the bands of rocks in which the veins occur indicated that the rocks contained no more than a trace of tin.

The known tin deposits in the southern portion of this lease are regarded, therefore, as not having any economic importance.

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