

I V A N H O E M I N E

This mine is situated on section 11216/M, 38 acres charted in the name of G.F. Plummer and J.A. Crisp, approximately $1\frac{3}{4}$ miles south-west of the Aberfoyle Mine, and can be reached from a point on the Avoca-Rossarden road, about 10 chains west of the Story Creek bridge, by means of a cart-track, a distance of about half a mile south of the road.

This section was formerly held under lease NO. 10374/M and was reported upon by A.M. Reid, the then Director of Mines, in 1929, as follows:-

This 38-acre lease is charted in the names of J.S. Goodall and G.F. Plummer, who hold in connection therewith Water Right 2630/W.

The lease encloses a section of a dyke of tin bearing graphic granite, opened about 30 years ago in shallow pits and trenches. Recent exploration shows the dyke about 100 feet wide, following a ridge coursing 315° . At the north end the dyke passes under cover of Permo-Carboniferous arkose, and southward it continues exposed at least 500 feet towards Story Creek. Traces of it may be seen in the detritus workings on the south-east side of the stream leading into a steeply rising hill, and in a cut on the bank of a small tributary.

The old cut (25 feet long, 5 feet wide, and 10 feet deep) exposes a large body of pegmatite, made up of feldspar, quartz, tourmaline, and cassiterite, the last two being in comparatively small proportion. All component minerals are coarsely crystalline and intergrown. The cassiterite appears as a natural primary component of the pegmatite. Intrusive veins of greisen modify the pegmatite; feldspars become pinitised; secondary flaky muscovite appears; tourmaline (green and black) shows up in greater abundance, and replacement of feldspars with quartz becomes a prominent feature.

A number of holes have been sunk into the soft pegmatite, the material from which shows a fairly high proportion of tin ore. At these kaolinised pegmatite spots the distribution of ore is fairly uniform. This decomposed material is being ground sluiced by the lessees, with the aid of a small volume of water and low pressure.

The actual value of the material of the dyke as a whole has not been determined, nor has its limits been defined, yet, as this very intersecting body is worthy of close attention. It could be attacked to advantage by open-cutting from creek level (300 feet below the highest point of outcrop).

This body, like all such large ones, will prove to be of low average grade. Its average value will show whether it is of any present economic importance. If the results of surface sampling prove satisfactory, its value at depth should be determined by drilling.

In July last the writer made a brief inspection of the property. Sluicing operations have been carried on intermittently, since 1929, and have revealed the presence of at least four, narrow greisen veins striking generally north-west and one practically north and south. The altered granite between the veins is soft and a face over 30 feet wide and 6 feet to 8 feet deep has been opened up.

Altogether the veins have been exposed over a length of at least five to six chains and several chains in width.

Three, 10 foot section, channel samples taken in the face about three feet above the floor gave the following results when assayed in the Departmental laboratory in Launceston:-

(1)	Reg. No. 1031	Tin 0.01 per cent
	" "	" " " "
(2)	" " 1032	" 0.06 " "
	" "	" " " "
(3)	" " 1033	" Trace

A sample of the greisenisation 3'6" wide just west of the 25 foot shaft showed

Tin - 0.54 per cent

From dish prospects, the soft kaolinised granite, apparently good results were obtained, but the chemical assay suggests that the concentrate obtained in dish prospecting contains only a small percentage of tin; therefore great care will be necessary in determining the extent and value of the prospect.

The irregularity of deposits of this nature (greisenisation in granite) renders it necessary to thoroughly prospect the area before a true conception of its value can be obtained. The softness of the kaolinised granite and good working facilities combine to make this a prospect worthy of further attention.

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