

PRELIMINARY NOTES ON BISMUTH AND SCHEELITE DEPOSIT  
KING ISLAND

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The deposit is situated 2 miles west from the Scheelite mine at Grassy. The ground is held under a Permit to Enter in the name of Bismuth Products Prop. Ltd. and which extends for 6 months from 8/5/42. The Permit is over 80 acres and includes two forfeited leases of 40 acres each (52 P/M and 53 P/M).

The old workings are situated near a south-easterly flowing tributary of the Little Grassy Creek and near the boundary between the above two leases. The main working was an adit driven northerly from near the bed of the creek. It cannot now be entered but is reported to be 220 feet in length. To the north of the adit and beyond its northern limit, three shallow shafts (deepest 28 feet) have been sunk and a small trench dug.

It was reported by Mr. C. Scott quarry foreman at the Grassy scheelite mine that the work was done about 1920 either by the old company which operated that mine or by some of the officials and persons connected with the company. About 1937, Messrs. C. Scott and J. Curtin became interested in the workings and had the adit sampled, but the sampling revealed very little scheelite.

Recently the Bismuth Products Prop. Ltd. cleared a track into the adit site and obtained a 5 ton parcel from the dumps.

The country rocks (as revealed mainly by the adit dumps) are soft quartzites similar to those at the Grassy Scheelite mine. Many specimens suggest metamorphism and possible development of pyroxene. Granite occurs in the next creek to the east but its extent is not known. Porphyry occurs in the trench to the north of the adit.

Mr. Scott stated that the last 100 feet of the adit were supposed to be in the lode. The material on the dump does not suggest any definite lode. Many specimens however have narrow veins and small segregations of a peculiar glassy and coloured quartz. Similar quartz occurs on the dumps of some of the shafts, and quartz fragments occur in the soil in the vicinity in which the work has been done. On the small amount of evidence available it is thought that there is no lode but rather a zone in which quartz veins and segregations occur, and that the scheelite and bismuth minerals occur in close association with the quartz.

The workings were conducted in a search for a scheelite lode. Dish prospects from the dumps revealed pieces of scheelite up to  $\frac{1}{2}$  inch in diameter. Small amounts of a sulphide (possibly bismuthinite) and a whitish mineral (probably oxidised bismuthinite) were also obtained.

The failure of the early workings to develop a profitable scheelite lode and the low sampling results stated to have been obtained from the 1937 work tend to prove that the rocks in the adit do not form a profitable body. (It is understood that the results of the 5 ton sample taken by Bismuth Products were Bi 0.05%,  $WO_3$  0.06%).

Mr. Q. J. Henderson, Field Geologist, Department of Mines, Tasmania, took two grab samples from the dump and will have them assayed. He is also having the bismuth minerals determined and will furnish a report.

In general, the deposit is not worthy of testing for bismuth and probably also not worth testing for scheelite.

(P.B. Nye)  
ASSISTANT DIRECTOR

23rd July, 1942.