

J. CURTAINS SCHEELITE PROSPECT.  
KING ISLAND.

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This scheelite prospect is situated in the parish of Reekara, near the centre of King Island. A report was prepared on this prospect in 1951 and since then a certain amount of exploration has been carried out principally by the King Island Scheelite Company.

It will be recalled that the country here is a flat featureless plain with sandy cover and no outcrop and that scheelite had been reported in, and seen on, the dump of a water filled shaft "Shaft C", as well as examined in a shallow shaft, "Shaft A". Since then the following exploration has been carried out.

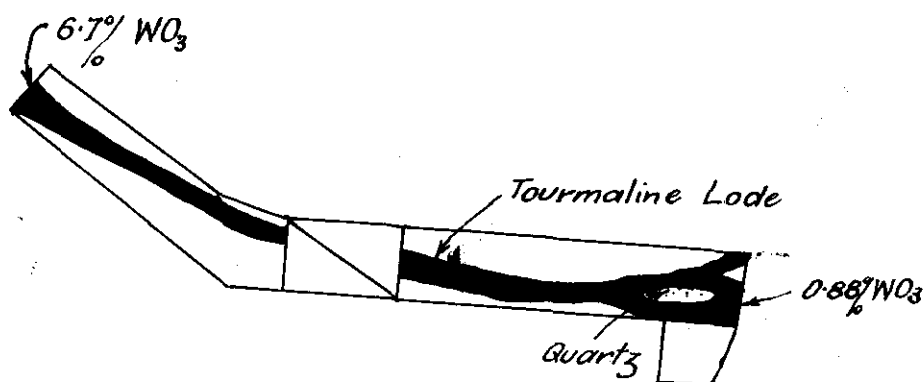
1. Shaft C was unwatered and examined, particularly the eastern crosscut where the scheelite lode had been reported.
2. Shaft A was deepened to 22 feet and short drives put out south-east and north-west along the tourmaline formation.
3. Two bores were put down in the vicinity of Shaft A to intersect the formation exposed in the shaft at approximately 100 feet below the surface. The results of this work seem to have been disappointing and the Company have, for the time being at any rate, suspended prospecting operations in this area. Part of the results of this prospecting (in Shaft A) I could see for myself but the remainder is based on Company information as follows.

1. The examination of the Eastern Crosscut of Shaft C failed to reveal promising scheelite and although analyses showed some tungsten values the company did not consider them high enough to warrant further development in this area.

2. Shaft A and the short drives from it at the 22 foot level could be examined. The workings are so close to the surface that the rock, a micaceous schist is so weathered that it is in effect a clay. The tourmaline lode, although it does contain some quartz is, in the main, quite soft and material from it can be washed in a dish. This lode is striking at 120° one side of the shaft and 325° on the other. It is practically vertical but nowhere of constant width, varying from 27 inches to 3 inches and at one point cutting out altogether. The scheelite, as seen by the ultra-violet lamp, is splashed quite irregularly through the tourmaline formation. A sample was taken from the end of each drive and the great divergence in results shows that the sampling of any small portion of the formation is quite useless, but of course it does show that appreciable scheelite is present here. It is interesting to note that some tin also occurs in this formation.

	% WO <sub>3</sub>	% SN
End of East drive (over 27")	0.88	Trace
End of West drive (over 15")	6.70	0.64

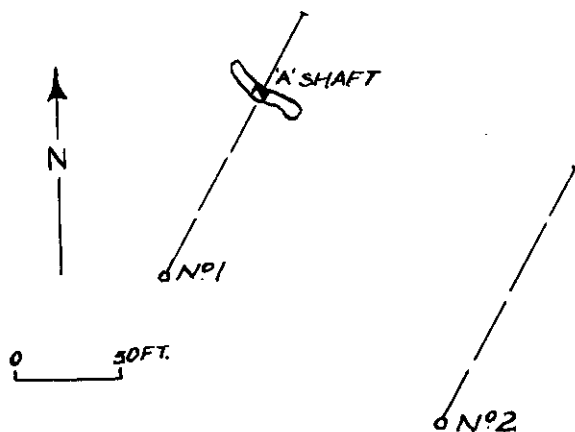
The scheelite in these drives glows under the lamp with a bluish white colour showing that there is little molybdenum with it in contrast to that seen in the upper part of the shaft.



"A" SHAFT 22'

1" = 10'

3. The results of the boring were disappointing. No. 1 bore was designed to intersect the formation at 100 feet below the shaft collar and the No. 2 at the same depth and 150 feet to the south east. Neither appeared to strike any definite tourmaline formation although it should be remembered that this material is very soft and may have failed to core. Small tungsten values were obtained almost throughout the bores.



This sketch shows the bores in relation to the shaft. Both are at an inclination of  $45^\circ$  in a direction of  $30^\circ$ .

The results of this later prospecting has been rather disappointing although the presence of scheelite in sensible quantities has been established in this area. The most promising locality to further investigate is the tourmaline formation in Shaft A. Unfortunately formations of this nature in schistose rocks are not noted for their regularity of width and they may possibly cut out altogether. I should not advise any further boring on this formation but rather if more work is to be done, the deepening of Shaft A so that the actual formation can be followed down.

It is unfortunate that regional prospecting is so difficult, because of lack of outcrop, but vigorous prospecting in the direction of Mt. Counsel, where granite is reported to outcrop may lead to the discovery of other scheelite deposits.

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