

UR 1957/57-58

HGwK/1

9th April, 1957

MEMORANDUMK.S. KIRTON - RADIOACTIVITY AT  
STAR HILL

The site of Mr. Kirton's prospecting is the original Star Hill. His prospect is situated two miles from Gladstone along the Gladstone - Herrick road and about 150 yards south of that road.

The area has been worked for alluvial tin and the surface gravels have all been removed to reveal the underlying decomposed Granite into which Tail Races of the alluvial workings have been cut.

It is in one of these Tail Races that his prospect is situated. The water referred to in his correspondence is the result of seepage and is sufficient to fill his prospect hole when left for a few hours. It is easily dried by bailing.

Several sites were tested with the geiger counter and all the sites selected by Mr. Kirton showed activity of varying degrees. All sites were characterised by narrow veins of widths ranging to  $\frac{1}{2}$  inch but of no great length. All veins were of a green or greenish yellow colour. The maximum count obtained by an Austronic RPM 200 geiger counter was of the order of 2000, this being in the prospect hole which is partly timbered.

There is no doubt that the site is in an area of greisenised granite and the coloured veins occur on the many joint planes of this granite. There has been no development to depth, the greatest depth so far attained being about 4 feet below the tail race or 10 feet below original surface.

The further testing of the area could be carried out either by

## (1) Shaft sinking.

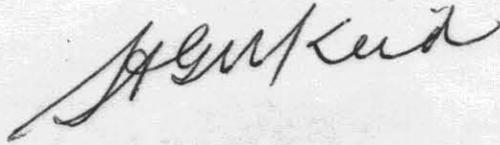
This would mean a considerable amount of work, particularly as the shaft would fill with water each night.

## (2) Testing with a Spud Auger or small post hole digger.

There should be no difficulty in getting this tool to the depth of the solid granite and as the decomposed granite is of a clayey nature the material should hold to the tool.

Director of Mines

- (3) It is possible a comparatively small Auger, say 1½ inch, with extensions to the handle would also serve to prospect this deposit.



(H.G.W. Keid)  
CHIEF GEOLOGIST.

The Director of Mines,  
HOBART.