

The Anchor is an abandoned tin mine from which 2358 tons of tin have been produced, the last mining being carried out in 1950. To reach the mine a steep winding road descends from the defunct township of Lottah for about two miles. Lottah is about 4 miles from Goulds Country or 13 from St. Helens on the road between Goulds Country, and Weldborough in the north-eastern part of Tasmania.

The tin here occurs in a granite, sometimes concentrated in fairly horizontal "floors" or vertical "pipes", but often disseminated erratically through the granite. There are two types of granite here, the tin bearing variety and a more porphyritic barren granite into which the former has been intruded. The ore has been mostly obtained from a whole series of open cuts and often the porphyritic granite has to be removed as overburden. According to Thomas (2) where the junction of the two granites is fairly horizontal tin is apt to be concentrated as a "floor" at the top of the tin granite, and the contact is a very sharp one marked by the presence of a darker band, a few inches thick, due to the concentration of mica.

It is in just such a band that the highest count was obtained, a count of over 1000 c.p.m. on a PRM 200 Counter. In the Haulage Face, one of the easterly faces, the contact between the two granites is marked by a distinct joint plane which dips to the south (2000) at 7° and at one place on this, a small cave-like adit has been put in. In this cave can be seen the black micaceous band between the two granites and at a spot in the southern part it is 3 to 4 inches wide and gives the highest count. In other parts, this band forms the roof and consists of quartz, mica and chalcopyrite, oxidising to the green carbonate.

Two samples were taken from this adit (1) was over 3 inches of the band itself and (11) from the granite from 4 feet just below and 1 foot above the band. These samples were sent to the Bureau of Mineral Resources for investigation and a radiometric assay showed that the equivalent uranium content of (1) was 0.22% U_3O_8 and (11) 0.02% U_3O_8 . The report further stated "In each case, absorption tests indicate that activity is essentially due to uranium, and that the actual uranium content may be rather higher than the value obtained by radiometric assay". It was not possible to identify the uranium mineral from the sample forwarded and a further sample will be obtained.

Meantime it is interesting to note that the assay indicates a uranium content of almost ore grade. It is a pity that the actual mica seam is so narrow but further prospecting may reveal a widening.

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References.

1. 1928. Geological Survey Bulletin No. 38 The Blue Tier Tinfield by Reid & Henderson.
2. 1943. Typewritten report Tin Deposits of Blue Tier District by Thomas.