

## Proposed subdivision of Crown Land, Friendly Beaches to Coles Bay

*by D. J. Jennings*

### Lot 1

This area is confined to the west of the watershed and carries no permanent water.

Bedrock for the majority of the area is granite with minor Jurassic dolerite to the west of a major fault. Devonian granite is well exposed only along the eastern boundary. Exposure is uniformly poor throughout the central and western parts, with bedrock outcrops inundated by Tertiary granule gravels of local derivation, in turn overlain by similar wash of Quaternary age. Locally, towards the western boundary, an ill-defined terrace is preserved, carrying coarser, rounded and angular quartz gravels which rarely cover more than 1 acre in extent, and provide occasional sporadic prospects of medium to coarse-grained tin. Results of limited prospecting in this region indicate that tin is unpredictable and impersistent.

Gillies Tin Reward in the northwest corner of Lot 1 occupies mainly flat ground amongst granite banks with local gravel cover. No tin was recovered from surface samples and only poor tin prospects were obtained from the debris about the single large prospecting pit located. Superior tin values are obtained from the gravel mantle overlying granite at shallow depth on Duncombe's property to the north, extending to the locality of Cowan's tin prospect.

The single tin-bearing gravel patch located in area 1 is poor, limited in extent and so far from any permanent water supply that it constitutes no grounds for objection to the sale of the land.

### Lot 2

This lot is geologically similar to Lot 1. The area is almost confined to the west of the watershed and is without permanent water supply.

Bedrock for the majority of the area is granite with indurated Mathinna Beds occupying much of the southern third, and minor Jurassic dolerite to the west of the major fault. Exposure is sparse throughout the central and western parts with a ubiquitous quartz granule-gravel float derived from Tertiary to Recent deposits.

In the course of the survey a patch of gravel float, preserved as before on an ill-defined terrace, was located on private property to the northwest of Lot 2. Traces of tin were obtained. Subsequently Archer and Gamble investigated a further low gravel-covered bank adjacent and east of the western boundary of Lot 2. This was prospected with a back-hoe and samples analysed at Launceston. Subsequent attempts to locate tin in the flats and poorly defined creeks immediately to the south were unsuccessful, in spite of a systematic programme of pits dug with the back-hoe.

Most of Lot 2 is currently covered by Archer's SPL 49. When this is relinquished an assessment of the feasibility of mining such a small deposit so far from permanent water should be made. In spite of the promising sampling results I doubt the project, but I have never seen the Coles Bay-Bicheno area except under drought conditions.

### Lot 3

This area lies astride the watershed and carries no permanent water.

The northern quarter of the area, inland from Isaacs Point, is composed of granite and the southern quarter about Mount Peter is composed of Jurassic dolerite with little Triassic (Ross) sandstone. Outcrops of poorly exposed Permian sediments, mainly siltstone and pebbly arkose, occur in the central part.

The terrain carries no coal measures. The most southeastern corner is composed of Cascade Group beds including some limestone. However the access is poor, the extent is small and the limestone occurs at

depth, being exposed only low in the valley sides. The area has no history of tin working and no other economic deposits are known.

#### **Lot 4**

This area lies well to the west of the watershed and enjoys the advantage of proximity to the Apsley River without actually reaching the river bank.

Entirely to the west of the main fault, the area is composed of poorly exposed dolerite, inundated with Tertiary sediments and superficial granule gravels. Many gravel and road material pits occur, both to the east and west of the road. Although all Tertiary gravels in this area are potentially tin bearing no tin prospects were located and there is no history of tin working in this area.

The northeast third of this lot falls within Archer's SPL 49.

#### **Lot 5**

This area, distant from all previous lots, lies to the west of the watershed and carries no permanent water. The area is composed mainly of granite and because of its similarity and proximity to proven tin areas was made the subject of a Proline drilling programme. Five lines of Proline holes were completed but only trace quantities of tin were recovered from samples tested.

To the southeast the granite obscured by blown sand gives way to Permian siltstone overlain by Triassic (Ross) sandstone. A down-faulted block in the latter preserves coal measures capped by dolerite but the inferred outcrop of coal measures outside the boundaries of private property is limited to a sliver between two converging faults some 400 yards wide at the maximum and 500 long. Outcrop evidence is sparse. The retention of this area as a consequence of the coal content appears unwarranted.

In the south, Lot 5 includes part of the 10 acre lease of R. & O. Montey (which provides good tin prospects in the creek north of the road) and also encroaches on an area exempt from the Mining Act, while under consideration as a potential source of water for the Coles Bay township.

However the tin potential of the area is low, and no justification can be offered for its retention.

#### **Leases and Licenses**

H. Meerding's SPL 39 for beach sands falls outside the proposed subdivision.

R. & V. Montey's 10 acre lease astride the road in the south encroaches on Lot 5.

A. K. Archer's SPL 49 includes large parts of Lots 2 and 4.

Hudson's (Industrial and Mining Investigations Pty Ltd) EL5/61 for limestone and coal involves the whole area.

#### **Conclusions**

The only known limestone deposit, that at Friendly Beaches, is not included among areas required for sale.

No significant areas of coal measures fall outside privately owned property.

Areas of interest for alluvial tin, particularly in the vicinity of Freshwater Lagoon, are not proposed for sale. Apart from the study of Archer's gravel bank in Lot 2, no grounds for objection or delay can be offered.

*[7 February 1969]*