Report on Extended Prospecting Area South Heemskirk in the name of R.B. Hill

## Situation and Access:

This area is situated in the valley of the Little Henty River, South Heemskirk. Its central portion is in the vicinity of the junction of Pike's Creek with the latter. The Federation Tramway connecting the Federation mine with the Government narrow gauge railway from Zeehan to Comstock passes within 1½ miles of the locality. A branch road from the tram at a point nine miles from Zeehan connects with section 124/M, formerly known as Mayne's tin mine, which is on the northernedge of the valley of the Little Henty River.

From Mayne's tin mine, a rough bush track leads to the River, a distance of one mile. By keeping out on the high land, a detour can be made westerly in practically cleared country to the mouth of the river, which is navigable for some distance upstream by rowing boat. The mouth of the River can also be reached by following the Federation tramway to the turn-off from the road to Trial Harbour, and from the latter point follow the sea coast southerly to the mouth of the River.

## Topography:

Thick bush land and steeply inclined valleys characterise the locality. At the junction of Pike Creek with the River a small area of level ground extends for a few chains up the latter, the width of which is approximately two chains, with heavily timbered steeply rising ground on either side.

From the general level of section 124/M through which flows Pike Creek, there is a fall of 500 feet to the River. At the point of junction with the latter, the bed of the creek is flat for approximately a distance of 10 chains; it then takes an abrupt rise for some distance on its course: as the higher ground is reached the slope ismore gradual to a point of short distance south of Mayne's old mine. From thence northerly it takes a sinuous course through the peneplain lying between the Heemskirk Mountain Range and the valley of the River.

Further easterly Burnt Creek takes it rise on the norther slopes of Mt. Agnew, and flowing across the plain, enters the Little Henty one half miles farther inland. The divide between Pike and Burnt Creeks is in low relief.

## Mconomic Geology:

The area covers a section of the valley of the Little Henty River along the banks of which in places occur flat areas of alluvium. These are covered with dense bush and lie at an elevation of a few feet above that or the River.

The valley of the River from its mouth to a point one and half miles inland has been the natural repositary of all rock material eroded from the stanniferous area to the south of the Heemskirk Range. This area is

approximately  $2\frac{1}{2}$  square miles in extent including what is known as Mayne's Tin Mine (Section 124/M), the Kelvin and other properties in the vicinity which have contributed large quantities of tin in past years. The mines are situated on the slate and sandstone country, the contact with the granite lies at a short distance to the north of Mayne's Section. On the latter a very rich irregular deposit of tin ore was discovered some years ago in the sedimentary rocks. Large quantities of detrital material rich in tin ore occurred in the vicinity of the outcrop, shed from the disintergrating tin lode formations occurring in the spur in which the mine workings occur The spur, which is encircled on three sides by Pike Creek, rises to a height of nearly 100 feet above the level of the latter.

Weather agencies have been responsible for much denudation of the country rock in the vicinity of the lode formations and to a lesser extent on the latter due to the more resistant nature of the lode material. There has, however, been large quantities of tin bearing debris shed from the lode formations accumulating on the side of the spur, in the bed and on the banks of the creek. Evidence of this was found for a considerable distance below the mine workings where large quantities of detrital and rubble were treated for their tin content with highly payable results.

The tin bearing debris accumulated along the Creek bed and its banks for a considerable distance below the mine. This occurs until the bed of the creek becomes too steeply inclined for the lodgement of material: the latter when carried beyond this point would be swept into the valley of the Little Henty River.

Evidence points to the fact that large quantities of tin bearing debris shed from Mayne's and adjoining properties as well as from the timbering granite areas to the north have been carried in to the valley of the Little  $^{\rm Hen}$  ty Riwer by the streams referred to.

At the junction of Pike's Creek with the Little Henty River is a small area of about two acres of flat ground which is thickly covered with light scrub. It is about two chains in width with steeply rising ground on either side.

Over twenty years ago some prospecting work was carried out by a syndicate called the Publicans Purse. Several shafts were sunk along the banks of the Creek to a depth of 15 feet. In silt below this rubble stone was struck which is stated to have carried payable quantities of tin. Owing to an influx of water the shafts were not carried to a sufficient depth to prove the value and extent of the drift. In some of the shafts driftwood and logs were met with.

On the River banks between the junction of Pike's Creek and the sea, small areas of drift have accumulated at the bends of the River. Lower down towards the south the flat areas are much wider but too low lying to allow testing exeept by boring.

## Conclusions:

The locality is very favourably situated as a potential source of tin bearing drift. The banks of the

River where accumulations have occurred are so low lying and densley covered with bush that a thorough superficial examination is impossible. To facilitate and inspection the areas should be defined by means of tracks, and a few scout bores put down in order that some preliminary information as to depth of wash and quantity of overbuden can be approximately ascertained. Tidal waters extend up the River to the junction of Pike's Creek. The rise and fall at that point is normally very slight, the maximum near the sea does not exceed three to four feet.

(J.B. Soott)
GOVERNMENT MINING ENGINEER

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