

3rd January, 1968.

The Chief Geologist,
Department of Mines,
HOBART.

Re: Moses Work on Blue Tier.

Moses is currently working flats at the head of Seven Mile Creek, between Mt. Littlechild and the Summit Ridge (site of the old Summit Mine). One lobe of the flats receives tributaries from Summit Ridge, and the other from the col between Summit Ridge and Mt. Littlechild. Previously all the tin in the flats has been attributed to a zone of tin granite outcrops on the Summit Ridge, as very good values are obtained in the headwaters of Seven Mile Creek and the tributaries on the Summit (eastern) side.

During logging operations in the myrtle forest on the eastern slopes of Mt. Littlechild, Moses found a deep narrow gutter, obviously man-made and not coincident with any minor creek over much of its length. The channel, often only 2'-6' wide is deeply incised in places and carries a foot or more of old tailings and/or recent wash and fill slumped in from the banks.

On the lower slopes (where the samples were taken from the gully) it seems to cut into a blanket of gravel which reaches several feet in thickness and may extend over much of the shallow-sloping ridge, but is poorly exposed in heavily forested country.

On the higher slopes some rudimentary workings consist of several branching gullies, all short, narrow and of varying depth (to 8' deep) and mostly cut into rotten granite bedrock. Large boulders and float-blocks of sandstone and conglomerate have been lifted and stacked, presumably part of a talus veneer from the sediments, (presumed Permian) which occurs as patches of great blocks on more level terraces on the higher slopes.

Working has been by ground sluicing from a small race running round both N and S flanks of Mt. Littlechild, to a diminutive dam above the workings. Conditions and working must have been extremely difficult so presumably values must have been reasonably high to support the operation.

It appears that some sort of tin source, vein or greisen occurs well-up on the slopes of Mt. Littlechild. Cassiterite from this has enriched the pediment deposit of basal permian debris on granite on the eastern flank of Mt. Littlechild. Ancient workers tracing-back rich alluvial patches (from the western lobe of Moses' flat) may have located this source. Tin from here must be preserved with "Summit" tin in the headwaters of Seven Mile Creek.

Moses refers to stained puggy tracts in rotten granite in the gully and old workings as "the formation"- and indeed he may have found something. He likes to

view this as the key to great future wealth. Such was the mode of sampling, however, that much or all of the tin may have derived from the floor of the old gully, or tailing race, and not from the "formation" at all. Access is difficult, proving a worthwhile deposit would involve a great deal of work - all in heavy forest.

Several samples were panned from the banks and floor of the gully, well down the slope, and all were rich in tin, so the value of six and one third lb. per yd. suggested by Moses is quite possible. These samples were retained by Moses, so have not been analysed or checked.

A letter from the Launceston Laboratories on 6-12-67 (8318/67) indicates that Moses has a series of specially prepared weights for use on a hand balance that allows him to read-off directly in lb. per cu. yd. from single pan prospects. His estimates by this method are highly reliable.

(Should he ever wish to exaggerate the value of his ground he would obviously add a bit of extra tin to the sample. No amount of analysis in Launceston would detect this!)

Moses records - 21 bags of tin obtained (= 2352lbs)
My estimate of yardage = 1100 yds.
Average value of ground = 2 lbs. per. cu. yd.

(D. Jennings)
GEOLOGIST