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## ALLUVIAL GOLD PROSPECT, BESSELLS CREEK, LISLE

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### LOCATION AND ACCESS.

The workings are situated near the head of Bessells Creek approximately one mile north-west of the old township of Lisle. Access is from Targa on the Launceston-Scottsdale highway, over nine miles of gravel road entering the western side of the Lisle valley. The workings are half a mile west of the road over a fair bush track.

### OBJECT

Following a request for monetary assistance received by the Director of Mines from the lessees, an inspection of the leases was made to determine their potential.

### GEOLOGY

The alluvial deposits consist of Tertiary sediments, mainly clays and gravels overlying decomposed granite. The depth of these sediments varies from a few feet to possibly 30 feet on the leases inspected. Detrital sandstone rubble forms the upper part of these sediments. Underlying this is a yellowish brown clay which overlies the gold bearing wash. This wash bed is up to four feet thick, and consists of boulders of sandstone, quartzite, quartz and slate with a little decomposed granitic material. The boulders are derived from the Mathinna Group of Silurian age, and the underlying granite is of Devonian (?) age.

### THE WORKINGS

No work is being carried on at present but some sluicing has been done on the leases over the past few years. This sluicing exposed a three to four foot gold bearing wash bed overlain by up to 25

feet of largely barren material. The gold recovered by panning samples of the wash was a mixture of fine and fairly coarse angular grains. The rough nature of the gold and the angular boulders in the wash indicate that this material has not travelled far from its source.

Sluicing also exposed old drive timbers, and apparently there has been an earlier attempt to panel out some of the gold bearing material. A search was made through the records but this failed to identify who worked the old leases or the amount of gold recovered. Several old reports mentioned that deep ground occurred in this vicinity, and that work stopped at the water table level as the miners were not equipped to work the wet ground.

On the southern bank of the workings the gold bearing wash is stated by Faulkner (one of the lessees) to occur eight feet below the elevation at which it can be seen in the northern bank. This could not be confirmed as the bank had collapsed, but the wash bed could not be seen at or near the same elevation, as it occurs in the northern bank, and unless the bed cuts out it must occur at this lower elevation.

The ground was sluiced with water obtained from a low level race, this gave about 50 feet of water pressure. This water was also used to elevate the material to the boxes to gain sufficient height to dispose of the tailings. The deeper ground on the southern side could not be worked as the head of water available was insufficient to raise the sluiced material to the boxes and dispose of the tailings.

To raise capital and overcome these difficulties Faulkner went into partnership. A gravel pump and petrol motor were installed, and work was started using water from the low level race. Because of the poor pressure a high level race was cut by bulldozer from Stoney Creek. However, before this race was used the mechanical equipment proved unsuitable for the coarse wash and after many breakdowns work ceased.

The high level race would give approximately a 150 foot head of water, but the supply would be limited to the wet season, lasting for six to eight months per year. To bring the mine into production the lessees applied for assistance to enable them to purchase a suitable gravel pump, a diesel motor and several hundred feet of piping.

### SAMPLING

Proper sampling was impossible owing to the collapse of the steep banks, but gold bearing wash was sampled in two places on the northern bank where the collapsed material had been cleared away.

The results of sampling were as follows:—

- S1—1.08 Dwt. per cubic yard; three feet thickness of wash.
- S2—0.76 Dwt. per cubic yard; three feet six inches thickness of wash.

The overlying material is practically barren but was not sampled as an uncontaminated face of material could not be found. The grade may possibly be better in the deeper part of the wash as it is possible that the higher material sampled is not part of the main stream channel. However any increase in grade would have to be sufficient to compensate for the increased amount of barren overburden.

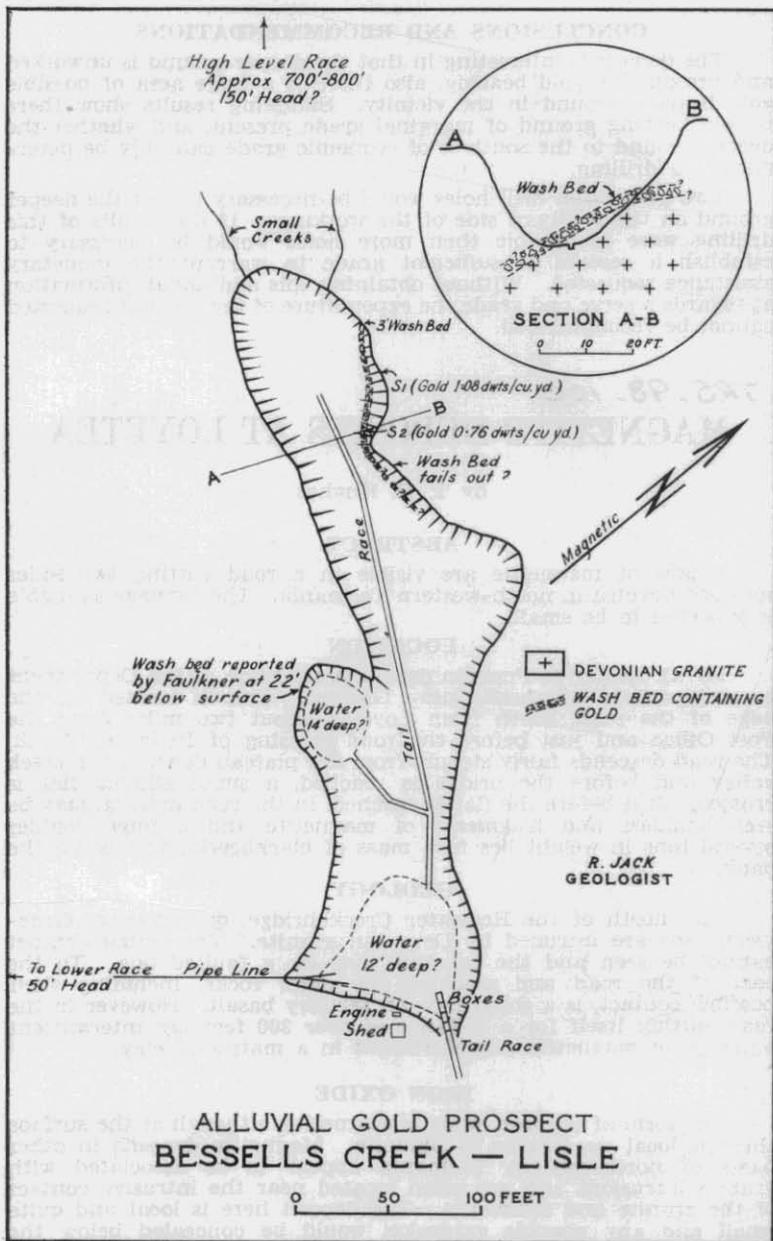
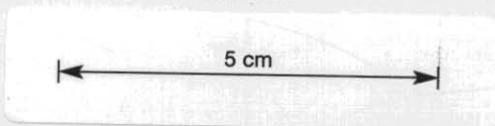


FIGURE 19.



**CONCLUSIONS AND RECOMMENDATIONS**

The deposit is interesting in that the deeper ground is unworked and presumably gold bearing, also there is a large area of possible gold bearing ground in the vicinity. Sampling results show there is gold bearing ground of marginal grade present, and whether the deeper ground to the south is of economic grade can only be determined by drilling.

Two percussion drill holes would be necessary to test the deeper ground on the southern side of the workings. If the results of this drilling were favourable then more holes would be necessary to establish a reserve of sufficient grade to warrant the monetary assistance requested. Without obtaining this additional information as regards reserve and grade the expenditure of the amount requested cannot be recommended.