

Report

on

JENNER & PARTY'S PROSPECT, SLATEY CREEK, LEFROY

This prospect is on Slatey Creek about 7 chains S.E. of the place where the creek passes out of the western boundary of J. Hern's freehold block.

In prospecting the creek, gold was found to occur over a limited length of the creek and prospecting was then devoted to the bedrock. The bedrock consists of slates of the Cambro-Ordovician system striking N.N.W. and dipping west at 30 degrees. The creek flows parallel to the strike for a length of 2 chains.

It was found that gold was obtained upon breaking up the bedrock and it was stated that an excavation 9' x 3' x 3'5" yielded 28 dwts. of gold. Further it was said that this gold came from the quartz etc. in the slates.

It was also stated that the gold was only obtainable from the slates when they had E-W brownish coloured joints in them and further that on sinking on these joints that narrow quartz veins were found to exist.

Most of the workings were in the creek bed, but were partly filled and hidden by debris from recent floods. However, the workings apparently comprised.

- (1) The excavation referred to above.
- (2) A trench on western side of creek some 2' - 3' deep to the south of the above.
- (3) A shaft in the bed of the creek (filled)
- (4) A shaft on the eastern bank of creek.
- (5) A trench being dug on western bank some 30' south of (2)
- (6) A trench and shaft (10' deep) about 40' west of (5).

It is quite clear from the visible workings that quartz veins do occur below the brownish joints.

It is also true that on breaking the quartz veins especially if some pug is associated with the quartz, that prospects do show prospects of gold. (those washed gave 1 to 3 fine colours). This gold may or may not have come from the quartz. Eight samples of quartz pyrite etc. assayed for Mr. Jenner gave no gold in six of them and 1 and 3 dwts. per ton respectively in the remaining two samples.

To the north of trench (2) it was stated that the slate bedrock with the brown joints gave prospects of gold. One dish washed did give 50 colours together with water-worn zircon (?), cassiterite (?) and a black mineral. However, the cleaner the slate bottom was picked and washed the smaller became the prospect.

In a tributary of Slatey Creek to the south of the workings, gold and carnelians can be washed from the alluvial ground. This tends to support the idea that the water-worn minerals and some of the gold is of alluvial origin and that in the slates has worked its way into bedding and joint planes. I believe, therefore, that the proportion of gold from the quartz, pug, and brown

joints that has been considered to be of primary origin has been exaggerated and that much of it is secondary (alluvial).

However, it is still possible that the quartz veins do carry gold as they are mineralised and contain abundant pyrite. A number of these have been opened up in the trenches and shafts. The object of the shaft (6) was to cut some of the more important ones at depth. It has proved an irregular set of veins some of which have the same E.-W. strike as in the creek while others are interbedded with the slates. The shaft has not revealed any veins of importance. The only possibility of success is that some of the quartz veins should become larger at depth and unite to form one more or less compact lode. There is nothing to indicate that such would happen however, as it is doubtful if further sinking of the shaft would prove anything of value.

The party desire assistance to sink the shaft 20 feet at which depth they expect to cut the group of veins exposed in trench (2). In view of the above the prospects are not very hopeful.

(Sgd) P.B. Nye

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GOVERNMENT GEOLOGIST.