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Dec 2nd 1920.

Hon. Wm. Sloen, Minister of Mines, Victoria, B.C.

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HOSEFLY

Sir:-

In November I made another extended examination of our Keystone Drilling work at <u>Harpers Camp</u> and as a result beg to submit to you this brief report summarising the results so far attained and an outline of the probabilities for the future. <u>HOLES DRILLED</u>.

The drilling may be divided into two parts:- (1) that done last winter, and  $\emptyset$  2) that done this summer and fall. In  $\emptyset$ 1) ten holes were drilled averaging about 45 feet in depth . none of which reached bedrock. This work was done on ground held by the International Dradging Company and as their plant will not handle ground below a depth of forty feet there was not much object  $\pm$ in drilling below that depth. This work proved conclusively that there was no ground in the area held by the company which could be worked at a profit. In fact practically no values were obtained at all. This work further demonstrated that the old-timers stories of rich ground and paystreaks were wholly unreliable. While negative in result this work has been useful.

In (2) the drilling was commenced on a plan to put a cross section of holes across an old valley of the Horsefly river with the hope of locating a feeding channel to the pay area previously worked out in Ward's workings. The probability of the existence of this feeding channel was strongly advocated by Bob. Campbell and others. The farst hole was put down 216 feet where bed-rock was reached. No appreciable values were obtained. This depth was considerably greater than had been expected and it was quite apparent from the surface topography that the next holes in our projected cross section would be still deeper. Without more equipment we could not have drille d depper holes as we had reached our limit in the first hole. By this time I had arrived at my own conclusions in regard to the matter and felt sure that further drilling in this direction would not show pay ground. So I abandoned this cross section and commenced a line of holes which would yield useful information and also test the ground held by Kennedy and partners, who had applied to have drilling done.

Seven holes were drilled in this work all of which were put down to bed-rock. No appreciable values were obte ined although the last hole tested ground where Ward left off work and where ground rich enough to pay drifting was supposed to exist. I was satisfied that we had done enough drilling to determine that there was no extension of the pay area in that locality so ordered the work stopped. I instructed Loveridge to move the drill across the river is and commence drilling the ground held by Campbell. Campbell and three partners have been working all summer on this ground and have sunk three shafts on it. They found some values but not sufficient to pay to "rift out. However they considered the ground worth further testing and still have lots of faith in it. Some time ago they applied to you to have the ground drilled. Campbell says that two

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holes will setisy him whether or not he says has anything but I expect that about four holes will be required to tell much. This ground is on the westerly edge of the pay area worked by Ward. CONCLUSIONS ARRIVED AT.

I am of the opinion that the rick deposit of goldbearing gravel which was known as Ward' Horsefly" and mainly worked out by R. T. Ward, was formed by peculiar local conditions and was not a part of a rich gold-bearing gravel channel running through the country, as is commonly supposed to be the case. At this point the Horsefly river takes a considerable band and also runs over a point of high bed-rock which pitches downward going upstream. These conditions made the bed-rock at this point act as a riffle on a large scale. In the course of time engemous quantities of gravel carrying small amounts of gold warms have beek washed down by the river and in part the gold was collected and mome concentrated on the high bed-rock. In this way a small area of very rich ground was formed with the values gradually fiding away in all directions. Allthe evidence of drilling and shafts shows that the deep ground in this locality carries no values.

## RECOMMENDATIONS.

I would recommend that the drilling be continued until Campbell's ground is teased which should be accomplished in two or three weeks. The possibility in Campbell's ground is that there may be a remnant of the old rich area left which was not worked out. After that I would recommond that the drilling should be stopped at least for the winter. So far we have had mild weather but with severe cold weather drilling in the winter time is very inefficient.

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After we finish up with the present work I do not consider that there is any use in doing any more around the old Ward's Horsefly pit. There are two other places near Harper's Camp where you will probably be asked to do drilling. I have estimated these palces roughly and that cannot see any great chance they contain pay ground. The drilling would be deep and I have not much confidence in findding values in eny of the deep ground. The drilling of these places can be considered next summer after I have made a more thorough examination of them. We will need a lot of new equipment for the drill before commencing a further drilling program.

I am, Sir,

Yours faithfully,

Resident Engineer.

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**RESIDENT ENGINEER'S OFFICE** 

HAZELTON, Dec 2nd 1920.

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John D. Salloway.

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