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FILE NO. .....

82F /14W

## MINERAL RESOURCES BRANCH

DEPARTMENT OF MINES AND PETROLEUM RESOURCES

101 - 2985 Airport Drive Kamloops, B. C. April 21, 1975

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Dr. J. T. Fyles Associate Deputy Minister Mineral Resources Branch Parliament Buildings Victoria, B. C.

Dear Jim:

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Mission Au - Will 1-12 Mining Claims Re: 82E/11W - Kelowna, B. C. 49051, 119020,

On April 15, 1975 with Mr. Rex Bruce of Hope, using a helicopter, Gallagher or Kelowna Canyon along Mission Creek was visited to examine reported gold values.

A photostat copy of the 1:50,000 topographic map is enclosed to show the proximity of the location to the city of Kelowna.

Tertiary rocks unconformably overlie altered, light green volcanics which strike 105° and dip south 70°. Mission Creek has eroded through Tertiary rocks to the older volcanics and the relatively flat lying Tertiary exposed is composed of buff colored banded silt containing fragments of bituminous material, overlain by a coarse, competent but interstitially friable, limonite weathering conglomerate with closely packed well-rounded to angular, granite, diorite, argillite peobles, cobcles and fragments from 0.1 meters to 0.3 meters. The interstitial material is predominately siliceous in the conglomerate. The conglomerate is overlain conformably by well-bedded, dark volcanics averaging 1 meter in thickness.

Within the silt and overlying conglomerate thicknesses are relative to local variation and disconformable relations between the silt and conglomerate probably exist as the conglomerate on one side of the creek is stratigraphically opposite silt on the other and there is no evidence of faulting of this magnitude. It is suggested that the conglomerates have been deposited in alluvial or stream channels, and that if the conglomerates were considered as a source of gold, that transportation directions might become important.

Suffice to say at this time that the conglomerate is at least 30 meters thick over a strike length of 250 meters conservatively, but that it may be variable in dimension.

The area may be of historical significance as it was in this valley that the early stage coaches changed horses. In later times the valley was used as a picnic site until the bridge across the creek collapsed.

There is evidence of earlier placer operations in the Mission Creek white sands. Apparently Mr. Bruce and company did some sluicing in the more friable silts but were soon blocked by the hydraulically impassable overlying conglomerates. The silt at this point would only be about 10 meters thick. There is a small adit at the base of the conglomerate striking 110° and is about 8 meters in length.

Samples were taken from this adit and a grub hoe was used to penetrate the surface layers by about 0.25 meters prior to taking 3 grab samples from 2 walls and the face. It is mentioned in passing that this is a free standing tunnel in the conglomerate with no support. Gold is reported mostly as flake with few nuggets.

In summary, if the samples appear attractive in Au values then the property should be considered with some limitations. For example, could some of the conglomerate be used as gravel after extracting any contained gold? Of more importance of course would be the historical significance of the canyon and of prime importance, the desirability of creating a community park in this valley as Kelowna undoubtly expands in this direction.

Incidentally, it is our understanding that placer leases were not granted on this ground, and sluicing on mineral claims 15 meters horizontal distance from high water is illegal is it not?

In the event that these samples show high values in Au I would like to go back and re-take the samples. The reason is that there were three people accompanying me and it was physically impossible to keep my eyes on all samples at all times.

Yours truly,

MILLIN Gordon P. E. White, P.Eng. District Geologist

GPEN: cc: Dr. E. Grove cc: Dr. W. Johnson Chief Analysist

