114P/14E
114P-4

888049

REPORT ON PLACER LEASES, SQUAW CREEK, YUKON TERRITORY, HELD BY YUKON VENTURES LIMITED (N.P.L.), A SUBSIDIARY OF VICTORIA VENTURES LIMITED (N.P.L.)

January 2nd, 1935.

By John A. Shaller
and
George Pearson.

PROPERTY

These placer leases commence (as shown on the annexed print), at a point approximately one thousand (1,000) feet from the junction of Squaw Creek with the Tatshenshini River and extend therefrom to the Yukon-British Columbia boundary, a distance of approximately four (4) miles. The entire property is held by Yukon Ventures Limited (N.P.L.), with the exception of the Yukon Discovery Claim, twelve hundred and fifty (1,250) feet in length lying just below the boundary line. Discovery Claim is held by a white miner, resident at Whitehorse, Y.T., who has agreed to sell or lease the same on a royalty basis to our Company.

The geographical and geological features of Squaw Creek and the Tatshenshini Basin, of which the former is a part, are described by Dr. Joseph T. Mandy, Resident Government Engineer for Northwestern British Columbia, District Number 1, in his reports for the years 1932, 1933 and 1934, (Annual Reports of the Minister of Mines, Province of British Columbia.)

The Creek bottom or bed at the lower end of the lease shows a width in excess of three hundred (300) feet, narrowing upstream to approximately two hundred (200) feet at a point about four thousand (4,000) feet from the lower boundary. From this point on upstream, the creek bed opens out into what might be roughly described as a series of large gravel pools or bays formed by the abuttments of the various solid outcrops on either side of the Valley. These gravel pools or bays vary in length from fifty (50) to two hundred (200) yards, and in width up to one hundred (100) yards, and extend to the lower end of a small narrow canyon. This canyon, lying between perpendicular walls, extends upstream about one third of a mile. Above this canyon the creek confines flatten sharply to the lower boundary of the Yukon Discovery Claim. From the upper boundary of the Discovery Claim to the Yukon-

British Columbia boundary, the ground lies in the area described as the "Squaw Creek Outwash."

That part of the left limit, or western bank of Squaw Creek, extending north-west from the lower end of the canyon, displays exposed many blankets or folded sills of slate, schist, quartzite and limesto ne, for the most part precipitous and lightly overlaid with glacial drift. Considerable amount of this overburden has sloughed off to form heavy slides with other talus in the creek bottom. The opposite limit or northerly side however, is more depressed and flattened, and much more deeply indented, and carries a much heavier overburden of glacial drift, in some places in excess of sixty (60) feet, below which was exposed a bedrock formation of limestone, schist and conglomerate.

DEVELOPMENT

After staking the aforementioned leases systematic testing of the gravels contained therein was undertaken by trenching, panning, pot-holing and sluicing during 1933 and 1934. Bedrock drains and cross-cuts run approximately every one thousand feet on the first two miles of Lease No. 1, with pot holes sunk to bedrock in between cuts. Gravel moved, carefully measured, and clean-ups taken every three to four box-lengths to determine any extraordinary pay streaks, if any. Significant of the fairly even deposit of placer gold was the fact that little variation in values of the different clean-ups was apparent, thus showing a very even distribution of the coarse gold throughout the gravel. Nuggets up to nine pennyweight were obtained together with coarse placer gold easy to save. Practically no black sand was evident in these operations, and no fine or flour gold that would be hard to save. AApproximately 350 yards of gravel was sluiced, yielding nine and one half ($9\frac{1}{2}$) ounces of gold. Basing gold at $30.00 per ounce, the yardage value would be approximately eighty (80) cents per yard. A conservative estimate of gravel in sight is one million, two hundred fifty thousand (1,250,000) yards, three-quarters ($\frac{3}{4}$) of which has been thoroughly tested showing the values indicated. Gravels tested and mentioned are those lying within the confines of the Creek proper, and do not include any of the bench gravels which were not tested, owing to lack of time and man power, but they would indicate a certain potential value worth prospecting.

CHARACTERISTICS OF SQUAW CREEK GOLD

Four distinct types of placer gold are found on this Creek:

1. Very irregular and angular, deeply indented and containing in these deposits of quartz or calcite. This gold shows no evidence of having travelled any great distance.

2. Smooth, well-worn and highly polished nuggets and pieces, exhibiting greater density and solidity than number one.

3. A type much discoloured with a dark scaly exterior, probably due to heavy alloying with copper and stained with iron.

4. Admixture with native silver, nuggets displaying a distinct line of fusion between the two metals - (Gold-Silver).

Examples 3 and 4 might be understood, as pieces of native copper and native silver are commonly found in the clean-ups on Squaw Creek, together with magnetite, iron oxide and cubical crystals of galena and iron pyrite.

RECOVERY OPERATIONS RECOMMENDED

Due to the physical characteristics of this Lease, the operation for recovery of the gold deposits would be the installation of modern hydraulic equipment. This would seem to be the most economical from every point of view, as the ground offers no possible chance for dredging.

While there is plenty of timber available for all requirements, it is recommended that regular hydraulic pipe be used for the reason that it can be installed with least delay and be in operation within thirty days after being landed on the lease. To build a flume would mean the transportation of a portable sawmill and boiler, and the time involved to complete same would consume the greater part of one season. The grade of the Creek, 4½% at the lower boundary, increasing to 7% further upstream, with a mean average of 6½%, gives an ideal fall sufficient to develop better than one

hundred seventy-five feet head. Water sufficient for continuous operations is available at all times during the working season. Ample dump for tailings is also available.

An estimate of the cost of/and transportation of all equipment required for this operation, based on prices quoted from reliable companies supplying same, together with cost of labour and subsistence for the year 1935 would approximate $35,000.00. Equipment designed to move a minimum of fifteen hundred (1,500) yards per day, working two shifts. Minimum working days in this area are from five to six months. Allowing for time necessary to move monitors and pipe when required, actual recovery operations would not be less than 120 days. The sluicing of a minimum of 150,000 yards of gravel showing a value of eighty (80) cents per yard based on gold value at $30.00 per ounce, would indicate a potential clean-up for a season of $120,000.00. The annual cost of operations outside of the cost of installation of equipment would not exceed $20,000.00.

ACCESSIBILITY TO PROPERTY

There are two ways open to reach this lease on Squaw Creek:

1. By airplane from Carcross, Yukon Territory.

2. By rail and truck via Whitehorse and Champagne, thence by dog team in winter through Dalton Post to the Lease. In summer there is water transportation from Champagne to the head of Dezadeash Lake, then via pack train 38 miles to lease.

No. 1 is recommended, for the reason that 'planes can land on Mud Lake while frozen and covered with snow, which is only about four miles from the Lease, with a downhill grade all the way. Cost of 'plane transportation has been reduced to the point where it is slightly cheaper than transportation costs through Whitehorse and Champagne, and far more time-saving. Planes can make from two to four round trips per day, weather conditions being favourable. To use 'plane transportation advantageously, it would be necessary to have all equipment at Carcross, Y.T., not later than March 15th, to ensure its being transported to Mud Lake before the spring break-up. There is a bare possibility that 'plane transportation from Skagway, Alaska, to Squaw Creek, Y.T., may be inaugurated this year, and if so, it

will eliminate the necessity of rail transportation from Skagway to Carcross at considerable saving.

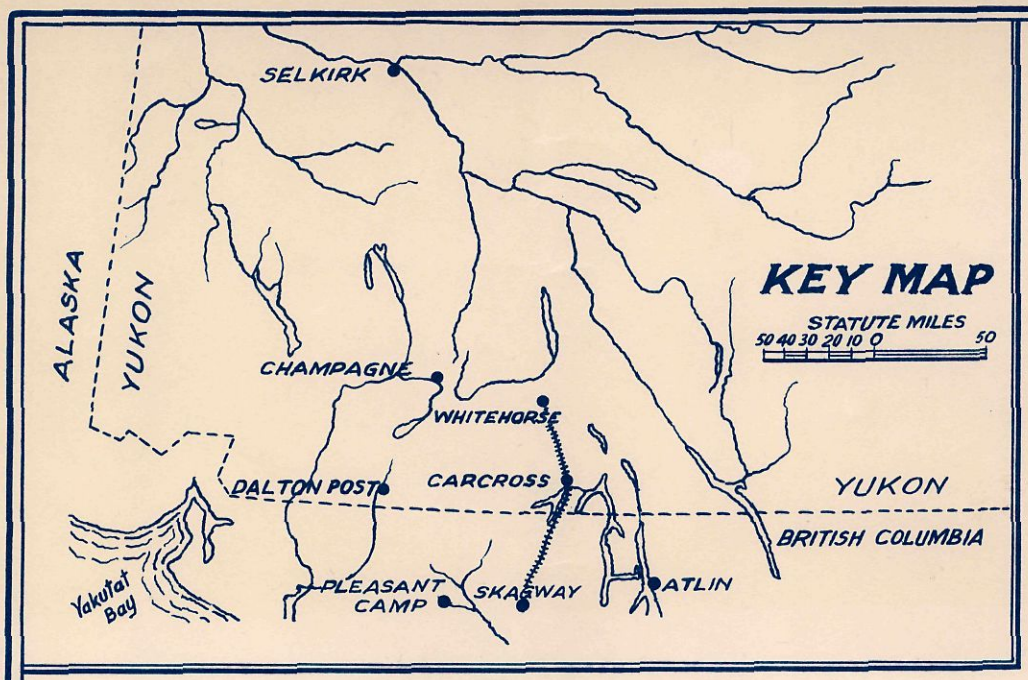
Respectfully submitted,

(Signed) John Shaller,
George Pearson.

NOTE:

Neither Mr. Shaller nor Mr. Pearson are Graduate Mining Engineers. Mr. Shaller is a placer miner with 25 years' experience in the Yukon and Alaska. He was foreman and superintendent for the Riley Investment Company at Flat, Alaska, in charge of their hydraulic and dredging operations for eight years prior to his coming out in 1923. His knowledge of placer operations and installation of hydraulic equipment is well established.

Mr. Pearson is a graduate chemist and assayist of the University of British Columbia, and was formerly with the Granby Mining and Smelting Company at Anyox, B.C.



DALTON POST

YUKON

Tatshenshini River

Half Way Creek

Trail

Trail

Silver Creek

Frying Pan Creek

YUKON VENTURES CAMP

Trail

SQUAW CR.

CANYON

MT BEATON 6900'

YUKON

Bridge Creek

YUKON

DISCOVERY CLAIMS

BRITISH COLUMBIA

BRITISH COLUMBIA

YUKON VENTURES LIMITED, N.P.L.

A SUBSIDIARY OF

VICTORIA VENTURES LIMITED, N.P.L.

Leases of Yukon Ventures Limited N.P.L. shown coloured red. Scale 1 inch = 1½ miles