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PRELIMINARY REPORT -

By: G. A. Diron

Yukon
Watson Lake Mining District
Yukon Pacific Prospecting Group
B.M. Group of Claims
Ag, Pb, Zn, Cu

On the invitation of Mr. Ron McBean I made a preliminary examination of this group of 40 claims on August 23rd to 25th, while in the Watson Lake area on another examination. These claims had been staked by Yukon Pacific Prospecting Group prospectors to cover a number of scattered showings found a short time previously by the prospecting team of Max Martin and Ernie Buck. Mr. Preakes referred briefly to these discoveries and stakings in his Interim Report of August 20th.

My examination was essentially reconnaissance in scope. Results are briefly reviewed in this report and illustrated by accompanying 1"=500' map.

SUMMARY - Known showings consist of a number of widely scattered skarn occurrences in limey beds in moderate to highly metamorphosed sedimentaries which lie in a broad trough-like structure between two areas of granitic intrusives. Mineralization is primarily replacement in character and consists of Pb, Zn, Cu sulphides, usually associated with magnetite. Interesting silver values (up to 23 oz) occur in at least one area. (Crutch Showing)

Present known showings are all small and not of economic importance but claims warrant more prospecting, some magnetometer and soil surveys and additional geological mapping. A program of this sort is recommended for early next season.

It is also recommended that up to 20 additional claims be staked before the end of the current season along the south boundary of the present group to provide sufficient protective ground.

LOCATION,

PROPERTY, ETC. - Location is 80 miles airline due north of Watson Lake and 20 miles north and 15 miles west of the highway to Canada Tungsten. Lies near the head of Jane Creek which drains easterly into Hyland River. Elevations range from creek level around 4250' upwards of 6500', on a south-facing slope. Timber is

sparse above 4500'. In a normal year snow should be gone by the end of June.

Based on my rush traversing it looks as if the two tiers of claims forming the 40 claim block have considerable overlap and some of the claims seem to be too long.

GEOLOGY - This area has not been mapped by the G.S.C. and hence age correlations are not known. Area is underlain by sedimentaries which are intruded by granitic rocks and both are overlain locally by later volcanics. The sedimentaries are variably metamorphosed into gneisses, schist, quartzite, phyllite, marble, skarn, etc. and are probably Palaeozoic or older in age. The intrusives are probably related to Cassiar intrusions and hence Mesozoic. The volcanics contain fragments of the granitic and older rocks and probably are Tertiary.

A mass of granitic rocks at least partly underlies the western part of the property and probably is connected with an easterly trending belt closely following the northern edge of the claims. This belt is apparently unconformably overlain by the volcanics forming the high summits further north and hence its actual width is unknown.

The sediments appear to lie in a broad trough-like structure flanked by the above areas of intrusives and could have a general plunge to the south. Its northern limb is roughly a dip slope; its western limb is transverse to Jane Creek; and attitudes are extremely variable in proximity to the western area of intrusives and the presumed axis. Metamorphism and intimate association with granitic intrusives strongly resemble conditions in the Shuswap terrane in southern B.C.

There is evidence of at least minor faulting and shearing - both northerly trending (45 and 47 Creeks) and also east/west bedded (45 Creek) but no major faulting was recognized.

Limestone and limey horizons are variably silicified and altered to marble and skarn. These horizons are particularly common in the upstream 900' mapped on 45 Creek but do not show again until 1500' down creek. Limey beds outcrop at the mouth of this creek, also a half mile to the west (Crutch showings) and to a less extent around the 46 and 47 Creek showings to the east. The skarn includes garnetite, diopside and epidote.

Any mineralization of interest is confined to the altered portions of the limey beds and is essentially replacement in character. Consists of magnetite, galena, sphalerite and chalcopyrite. Samples taken indicate the following values: Au, trace only; Ag, up to 23.00 oz.;

Pb and Zn, each up to around 6.0%; and Cu, under 1%. Silver values, however, are under 3.00 oz except for three float samples from the Crutch showings. Two showings with considerable black manganese staining and some suspected rhodonite and rhodochrosite failed to yield more than traces in silver. Some of this manganese staining is probably from manganese skarn and perhaps also some franklinite.

NOTE ON THE

SHOWINGS - According to Max Martin and Ernie Buck there is no evidence that this area has been prospected previously. Their own prospecting this season on the staked ground has been primarily reconnaissance in character.

The present known showings are scattered over a distance of six claims. Consist of some showings on 47 Creek, others on the higher slopes west of 46 Creek, several scattered along 45 Creek and an area of float about a half mile further west.

Those seen in place are all small and not of economic importance based on their present outcrops, but at least they indicate that skarn type replacement mineralization occurs in widespread fashion through this area. The Crutch float showings contain some interesting silver values and are enhanced accordingly.

Presence of favourable limey beds and structural conditions (folding and near proximity to contacts) leave open the possibility that some showings of economic importance may exist on this property or elsewhere in this area.

Crutch Showings - Consist of a trail of mineralized float boulders scattered over an area 350' by 100' on a drift covered bench at the base of the main slope. Boulders are subrounded, up to several feet in diameter and appear to originate locally, probably toward the northwest where there are two small outcrops of limestone. Three so-called "near outcrops" of granitic rocks shown on the map in this vicinity may be sorted morainal material instead. In any case, granite is suspected hereabouts, probably tying in with the low scarp etc. outcrops along the main creek.

The mineralized float consists of diopside, epidote and less garnet skarn heavily mineralized with magnetite and containing galena, sphalerite and chalcopyrite equivalents up to at least 6% Pb, 4% Zn, and 0.5% Cu, respectively. Feature of particular interest is the presence of silver values up to 23 oz.

45 Creek Showings - Series of limey beds in the upper 900' of mapping on this Creek are variably altered to skarn and contain irregular and erratic magnetite and Pb, Zn, Cu sulphides. Assays are shown on two

of the stronger occurrences but indicate only low Pb, Zn, Cu values and only one low silver value. The Cascade showings at the lower end of this stretch of the creek are small lensey skarn occurrences in an area of local folding and minor northerly faulting.

No liney beds were seen in the next 1500' of outcrop down creek but considerable mineralized skarn float occurs in the wash. At 4' manganese stained skarn bed then outcrops, but is only sparsely mineralized. Hower half mile of creek was not traversed but it is understood few, if any, outcrops exist in this section. Flat lying liney beds at the mouth of the creek show a little skarn alteration only.

46 Creek Showings - These were only briefly looked at late one afternoon. As seen in place consist of weakly mineralized, minor skarn alteration along the hanging wall side of a limestone bed which occurs in dip slope fashion hereabouts. Chalcopyrite occurs in sparse amounts and there is a small showing of magnetite nearby which was not seen. Down slope to the east some weakly mineralized skarn float shows in the talus and probably is not far from being in place. Dusk prevented checking this area further.

47 Creek Showings - Consist of small skarnish replacement occurrences in proximity to a series of minor, northerly trending faults or shears cutting cherty and altered argillaceous sediments. The replacement mineralization occurs for short distances over thicknesses up to several feet at most and appears to be either bedded and/or related to the shearing. It is believed the mineralization occurs in altered liney components of the cherty horizon. Assays of selected material assay up to 6% Pb, 5% Zn. Little or no magnetite occurs in these showings.

EXPLORATION

POSSIBILITIES - On the basis of present information and interpretations the most likely areas of interest are the vicinity of the Crutch float showings and southeasterly from this along the inferred (but by no means certain) complex axial zone. Chances are that the float originates from skarn bodies which may be relatively small and discontinuous but there always is the chance that something of important size and grade occurs hereabouts, particularly with the help of the higher silver content. Also if the inferred synclinal structure exists then liney beds outcropping on the upper part of 45 Creek can be expected to underlie the axial zone, where structural conditions should be more favourable than along the open flanks. It must be admitted, however, that conditions by no means are ideal at the best because of the complex of metamorphics and intrusives, particularly around 45 Creek and probably further west.

Some exploration possibilities still exist in limey beds bordering the northern granitic belt and this zone warrants further prospecting and investigation.

CONCLUSION AND

RECOMMENDATION - Exploration possibilities are long shot but staking and recording of this ground were fully justified. Following recommendations are suggested:

- (1) A further string of up to 20 claims should be staked two-deep along the south boundary of the present block. This should be done before the end of the present season to provide sufficient protective ground in case something of importance turns up; and particularly to cover any possible southeasterly to southerly projections.
- (2) Detailed prospecting around the Crutch showings and between this and the unmapped part of 45 Creek; also along the latter and further southeast.
- (3) Reconnaissance prospecting along the southern contact of the northern belt of granite.
- (4) Magnetometer and soil survey of area described in (2). This includes some drift covered benches. Should be followed by E.M. survey if then seems warranted.
- (5) Further geological mapping.

It is suggested, except for the staking of additional ground, that the above be deferred until early next season so that our prospectors can continue their program of primary areal prospecting for the balance of the present season.

Respectfully submitted,

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