



PRELIMINARY RESULTS OF 1991 PROGRAM TO ASSESS MINERAL POTENTIAL OF THE
ALSEK-TATSHENSHINI AREA

A geological mapping, geochemical sampling and mineral deposit investigation program was undertaken in the Alsek-Tatshenshini area from July 2 to September 1, 1991 to inventory mineral occurrences and assess mineral potential. The following constitutes our preliminary assessment of the Alsek-Tatshenshini area. Our observations are based on the two month field season in the areas outlined in Figure 1 and only the first batch of assay results. Our observations do not extend to the southern part of the Haines Triangle. As only a small number of assays have been completed, this assessment is based almost entirely on geologic observations. Additional data will be provided by completion of regional geochemical surveys.

1. Rocks with high mineral potential are Late Triassic in age and occur in a relatively restricted, northwest-trending belt approximately 7 km wide (Figure 1). They may have formed in an ancient rift system not unlike the present day Red Sea or Gulf of California. Parts of this belt of Upper Triassic rocks contain significant copper deposits, such as Windy Craggy (Figure 1). To emphasize this, our mapping alone resulted in the discovery of four new mineral occurrences within 10 km of the Windy Craggy deposit. Most significant of these is the "Rainy Monday" occurrence. It is over 600 metres long, over 150 metres deep, and is up to 100 metres thick. Assay samples from this zone have yielded up to 20% copper, up to 2 grams per tonne gold, up to 28 grams per tonne silver, and up to 0.27% cobalt.
2. Metamorphic rocks present near the southwestern border of the map area may also have significant mineral potential. A mineral occurrence that we discovered in this area is visually estimated to contain up to 5% copper in rocks that were originally much like those at Windy Craggy. However, the area is remote, rugged and icebound. Development would be difficult and unlikely to be economically feasible in the near future.
3. Paleozoic limestone underlies a significant portion of the map area but contains only a few scattered mineral occurrences that appear to be of limited extent. Therefore, areas dominantly underlain by these rocks are tentatively given a low mineral potential. Assay and regional geochemical survey results to test these observations are pending.
4. The third major rock type in the map area, Jura-Cretaceous granitic rocks, are associated in some instances with iron-copper skarn mineralization around their margins. These occurrences tend to be small and irregular, and therefore have relatively low mineral potential.

SUMMARY

1. Upper Triassic rocks of the Haines Triangle area are exceptionally well endowed with mineral resource wealth. Volcanic and sedimentary rocks that formed in this environment host a phenomenal wealth of copper mineralization and as such probably host a number of major mineral deposits. The surrounding limestones and younger intrusive rocks do not appear to host significant mineralization, and could be set aside from exploration without significantly impacting the mineral reserve base.

2. The Tatshenshini-Alsek area has the potential to have a major impact on the long term viability of the B.C. mining industry.
3. Rocks west of the Alsek River and within a 1 to 2 kilometre-wide corridor east of the Alsek River appear to have either relatively low mineral potential or are so remote and difficult to access that development costs would be prohibitive.

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