

January 28, 1991

## MEMORANDUM

TO: A. DALFEN  
FROM: N. CARTER  
RE: ALPHA - BETA PROPERTY - INTERTECH

Summary and Conclusions

The Alpha claim block includes a number of areas with anomalous gold and copper values in soils which are marginal to aeromagnetic high features interpreted as being granitic intrusions. High IP chargeabilities are marginal to the aeromagnetic highs and are partly coincident with the geochemical anomalies. Both the geochemical and geophysical signatures are typical of a porphyry copper-gold environment similar to Mt. Milligan and the property is considered to represent an attractive drill bet on the basis of Noranda work completed to date.

Selco drilling in the early 1980's, apparently in the eastern part of the present Alpha claim block, may be particularly significant. One hole, designed to test an airborne EM anomaly, intersected graphitic sediments and gneisses. Three consecutive samples from drill core yielded gold values ranging from 0.012 to 0.034 oz/ton. The exact location of this hole should be established to see if it is indeed on the present Alpha claims - in any event these results indicate that presence of gold mineralization in this environment.

Introduction

At the request of Mr. Arthur Dalfen, the writer met with Al Raven of Intertech in Vancouver January 24 to discuss the Alpha-Beta property. At that time reports of work done on the property were obtained from Mr. Raven. These were assessed and a brief examination of data on file with the British Columbia Ministry of Mines was also undertaken.

Mineral Property, Location and Access

The Alpha and Beta claim groups consist of 6 Modified Grid claims (132 units) which partially surround the Placer Dome WINDY prospect on the Salmon River 50 km northeast of

Fort St. James and 25 km southeast of Placer Dome's Mt. Milligan copper-gold property. Access is by a network of logging roads.

The Alpha and Beta claims are registered in the name of E.S. Peters and are subject to agreements with Intertech and Noranda.

#### Previous Work

Selco Ltd. carried out work on claims in the general area of the present Alpha property in 1981 and 1982. Selco's claims were located subsequent to a regional airborne EM - magnetometer survey and follow-up work consisted of ground geophysical surveys and one drill hole which was apparently located in the southeastern part of the present Alpha claim block.

A geochemical sampling and prospecting program was carried out over parts of the present claims in 1987 on behalf of E.S. Peters. Noranda optioned the claims in 1989 and work to date includes soil, rock and pine bark geochemistry, an airborne magnetometer - EM survey and 4 lines of IP survey on the Alpha block in 1990.

#### Geological Setting

The Alpha claim block is believed to be principally underlain by Takla Group volcanics and sediments. These are described by Noranda as being hornfelsed or metamorphosed, suggesting the presence of nearby granitic intrusive rocks. Granitic intrusions are also indicated by 1000 by 500 metre "thumbprint" aeromagnetic highs and semi-coincident areas of higher resistivities in the western claims area.

Bedrock exposures are limited to higher areas of the property - principally the eastern claims area. Noranda reports describe sheared andesites with local quartz-carbonate-pyrite veining as being the dominant rock type; also present are graphitic sediments.

The graphitic sediments appear to be the prime cause of airborne conductive zones investigated by Selco in the early 1980's. One Selco drill hole appears to have been put down in the eastern part of the present Alpha claims but the quality of location map submitted by Selco which was examined by the writer leaves much to be desired. Significantly, this hole penetrated about 35 metres (vertically) of overburden before

intersecting intercalated older gneisses and graphitic sediments. These older gneisses are not mentioned in Noranda reports but are known to be present in the general area of the claims. Three samples from drill core had gold values of between 0.012 and 0.034 oz/ton which is considered significant. Copper values were less than 0.01%.

Noranda's soil geochemistry and IP survey responses are indicative of a porphyry copper-gold environment. Anomalous gold and copper values in soils reflect the common northeast glacial dispersion but are marginal to the aeromagnetic highs which are interpreted as being intrusive bodies. Similarly, high IP chargeabilities are also marginal to the magnetic features and are partly coincident with the areas of anomalous soil geochemistry.