

CORPORATION FALCONBRIDGE COPPER

MEMORANDUM

DATE: May 29, 1986
TO: Larry Reaugh
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DE FROM: Ian D. Pirie
SUBJECT: Rea Gold Option - Silver Zone

see file copy for
figures

Introduction

The following brief report will summarize our knowledge of what we have called "the Silver Zone" on the Rea Gold property at Adams Lake.

Discovery

The Silver Zone is a mineralized zone first located in drill hole RG-37 while testing a MaxMin I anomaly. It is nowhere exposed in outcrop, nor does it have a soil geochemical signature, but drilling of the conductor over 2.5km of strike length has shown it to be consistently mineralized (Figure 1).

Geology

Geologically, the stratigraphy hosting the Silver Zone is very similar to that hosting the known mineralization (L97, 98 and 100 lenses). An inverted sequence of mafic pyroclastics, "Rea Breccia" - type chert with argillite, muddy tuffaceous sediment and greywacke is consistently present. Mineralization can occur at the pyroclastic - chert contact, within the upper parts of the chert or within the muddy tuff. The mineralization, unlike that on the main horizon, is non-arsenical, typically consisting of tetrahedrite with sphalerite, pyrite, galena and chalcopyrite, with silver predominating over gold. Footwall alteration seen to date in the drill core has been weak, at best.

Distribution of Mineralization

Figure 2 is a longitudinal section showing the pierce points of all holes drilled to date on the Silver Zone. Note that 15 to 19 holes have

intersected some sort of mineralization. The most significant areas have been a massive barite lens intersected in RG-44 and 45 on Line 102 and a massive sulphide lens intersected in RG-55 on Line 114. Both appear to have limited tonnages, but they both confirm the potential of the zone.

Figures 3 and 4 show the distribution of Ag and Zn respectively on the longitudinal section. Particularly high areas are apparent around the barite and sulphide lenses and also around RG-37, an area returning consistently high Ag values without actually having massive sulphides or barite.

Significant gold values have been obtained in RG-45, 55 and 53, the last of these being 4.79 g/T over 1m. These are also from syngenetic, non-massive mineralization and indicate good potential for auriferous deposits similar to the known mineralization.

Potential and Future Exploration

Drilling on the Silver zone to date has outlined a very large area of mineralization with reasonable grades over sub-economic widths. It indicates widespread submarine hydrothermal activity at a fairly specific time interval. As yet, no main vent zone, usually indicated by intense hydrothermal alteration, has been identified in the geologic footwall. This suggests that the main mineralized area has still to be found.

The prime exploration potential lies in an interval of some 650m. between RG-53, on line 95+35, and RG-48, on line 101+50. This interval is bounded by the best gold values at one end and the barite lens at the other. Strong soda-depletion accompanied by zinc enrichment is present in the footwall rocks in the area, suggesting a hydrothermal conduit might be present. The only reason this area hasn't yet been drilled is inaccessibility and rugged topography; problems which should be overcome this summer.

Additional potential exists northwest of the existing drilling. The presence of the horizon has been confirmed to L115+50, but the geophysical anomaly continues to at least L122 and possibly further (Figure 1). Ground prospecting has failed to yield any clues since the area is till covered but diamond drilling will be undertaken based on both soil and geophysical anomalies.

Conclusions

The abundance of mineralization along a narrow stratigraphic level in the Silver Zone indicates a major hydrothermal system for which a main vent area has yet to be found. It is hard to imagine a better indicator for volcanogenic massive sulphide deposits. Along with other targets on the Rea Gold property, the Silver Zone will continue to be explored by CFC as a top priority.