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Summary Description of the ~~Dunsmuir~~ Copper Showing, Nugget-Creek Group, Postuk-Fulton Option, Mt Sicker Area, Duncan, B.C.

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Conclusions

Stringer and disseminated Chalcopyrite-pyrrhotite mineralization occurs in outcrop near $46+00W$, $5+50N$ on the Nugget Creek Group, Postuk-Fulton Option, Mt-Sicker Area, located 20 km north of Duncan, B.C.. This mineralization occurs within the Hangingwall Sequence (Pirie, 1983; Lefebvre, 1984) stratigraphically higher than the Lenora-Tyee Mine horizon and the Postuk-Fulton trench zone. The sulphides appear to be volcanic related (occurring within a mafic volcanic tuff or flow) however a mafic (gabbro-feldspar porphyry) intrusive occurs within 3 m of the showing.

Coincident anomalous Zn and Ba contents occur within the volcanic rocks exposed near the showing; Anomalous Zn and Cu contents have also been found in the soils nearby.

Recommendations

The presence of a zinc anomaly in the immediate vicinity of the showing is significant - in relation to the mineralization uncovered at the Postuk-Fulton trench and at the Lenora-Tyee Mine area. Alternately the mineralization may be related to the gabbro-volcanic contact. Further discussion should await the results of the P.E.M. survey in progress at the present time.

Location

The zone of mineralization is located near L6+00W, 5+50N on the Duinsmuir claim which forms part of the Nugget Creek claim group optioned by Corporation Falconbridge Copper from Dr. P. Postuk and B. Fulton of Duncan, B.C.

Geological Setting

The mineralization is exposed in an area of sparse outcrop; the area being underlain by northwest trending, steeply north-dipping (and probably north facing?) sequence of tuff to lapilli mafic and intermediate volcanic tuffs in contact with a roughly conformable (?) feldspar porphyritic to medium grained gabbroic intrusive (fig. 1). A ^{barren} thin (2-3m) intermediate to felsic tuff to lapilli tuff occurs locally between the sulphide zone and the intrusive.

The mafic and intermediate volcanics appear to form a horizon which is stratigraphically higher than the Lenora-Tyee Mine horizon and the Postuk - Fulton trench mineralization (i.e. this horizon may form part of the hanging wall sequence (Pirie 1983; ^{see} Lefebvre 1983)) (fig. 2).

Mineralization

The sulphide mineralization is restricted to a 5m thick horizon of massive to tuftaceous fine-grained mafic volcanic (containing 1-2% pyrite-pyrhotite clots up to 2cm in size). The chalcopyrite-pyrhotite mineralization is exposed in a trench/adit of unknown origin blasted into the western side of the outcrop (fig 1). It consists of a 0.5m wide possibly vertical (?) zone of sulphide; 15-20% ^{stringer} pyrrhotite with 1-2% chalcopyrite occurring as mm-thick stringers and clots (almost intergranular in appearance) with a weakly bleached fine-grained mafic volcanic or tuff.

Results from the 1983 litho geochemical survey (in particular Sample #'s PF 2208 and PF 2209) show coincident, ^{anomalously} high Zinc contents (PF 2208 - 136 ppm Zn) and relatively high Ba contents (PF 2208 - 820 ppm) in the immediate vicinity of the showing (fig. 2). Anomalous Zn and Copper contents were also found in the soils surrounding the area according to ^{Ronning/} Serem (1980). There is no evidence of Na_2O depletion in the area however.

References

Ronning, P.A., Serem Ltd.

1980: Geology and Soil Geochemistry, Mt. Sicker Property; S.E.R.E.M. Ltd., Internal Company / Assessment Report. 34 p., 2 appendices, 7 maps and 2 figures.

Pirie, I

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LeFebure, D.

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