765-> 16-Smillien Kerr

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upper alteration band. Tourmaline is present in the lower alteration band, but apparently no economic mineralization is present.

Above the Sulphurets thrust there is a fault-truncated, weakly developed porphyry copper system. Chalcopyrite and magnetite are peripheral to steeply dipping, trachytic K-feldspar porphyry dikes. Grades are modest and the dikes are cut off by

the Sulphurets Thrust.

At Kerr previous sites were redrilled in the hope of improving grades by improved core recovery, but recoveries were only marginally better despite painstaking efforts. One of the causes of drilling problems is a post-mineral brecciation event that is healed by anhydrite/gypsum. Dissolution of the sulphates and the schistose fabric of the ore zone rocks results in deep oxidation and supergene minerals (chalcocite, covellite) in the Rubble Zone. At a 0.3% Cu cutoff the Kerr deposit is 1300 meters long, 100 meters wide and 700 meters deep. Chalcopyrite is the chief copper mineral, a quartz-sulphide crackle breccia contains the best grade. The entire ore zone is a quartz sericite schist zone with sheeted quartz veins parallel to shearing. Green sericite and yellow-brown sericite are present, the latter variety is speculated to indicate a sedimentary protolith. Fragmental volcanic rocks, with minor sediments predominate on the west (hanging wall) of the Kerr shear zone but argillite/siltstone (Stuhini or Unuk Formations?) occurs on the east (footwall) side.

*Visited Corona's exploration project at GNC (the claim block that surrounds the Eskay deposit) in the middle of a 7-hole program on August 6. I was shown around by Carl Edmunds and Dave Kuran. Corona is using sound geology to direct drilling of conceptual targets, a marked departure from earlier exploration at Eskay which was driven by good intersections. This new phase of geologic modelling is exemplified by the 800 meter planned depth of the fourth drill hole, which was collared during my visit. The most significant change from the Prime geological map is recognition of a gently north-plunging anticline whose closure is obscured by northerly faults and facies change. The stratigraphic section is well controlled by fossil and radiometric dating. Some new techniques include:

-trial seismic survey to map basement structures

-chemistry of conformable and discordant footwall alteration

-interpretation of transport direction in hanging wall rocks (Eskay sulphide deposits are linear, filling grabens. Paleotopography determined from the hanging wall may be more useful than doming of the footwall rhyolite.)

*Visited the Spectrum gold project in the Mt Edziza Recreation Area on August 7, at the conclusion of a 6 hole (2331 ft) program supervised by George Norman. Gold occurs in structurally controlled veins near the margin of a Jura-Cretaceous monzonite which exhibits porphyry copper style potassic alteration (Kspar, biotite). Most pre-1992 drilling has been in the QC Zone (614,700 tonnes at 12.3 gpt Au at 5 gpt cutoff according to a Columbia Gold in-house reserve calculation), but current drilling was directed to the 500 Colour Zone (3 holes) and the previously undrilled East Creek Zone (3 holes) Hole 92-87 in the East Creek Zone drilled down a semi-

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