Nizi

886161

TOS → 16-Smithers

TO: V.A. Preto, Manager,
District Geology,

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HANK

Their target is disseminated epithermal gold associated with quartz-clay-pyrite alteration and pervasive silica (cap?). Homestake's program consists of geological mapping and geophysics.

*Joined in with John Thompson and an MDRU team to visit the **Galore** porphyry copper deposit on August 8, guided by Steve Ens, representing Kennecott. Unfortunately this major deposit is slated for the shelf once again.

NIZI

*Visited the **Nizi** Au-Ag-Zn project with Dorothe Jakobsen (EMPR-Minfile) and George Cavey (Orequest) on August 25. Our guides were Bill Bond (Gold Fields) and Rob McIntosh (Gold Giant). Host stratigraphy is mafic to intermediate volcanic rocks and minor sediments presumed to be Sylvestor Group, in northern part of the poorly mapped Cry Lake sheet. Locally these are intensely silicified, to such a degree that the field term "rhyolite" was used initially. A feldspar porphyry intrusive (sill?), intensely altered, can be recognized within the silicified zone which is approximately conformable with stratigraphy. Mineralization occurs in two structures: (1) Au-Ag in difficult to recognize silica-barite replacement veins (Discovery, Grizzly Ridge, Surprise veins) that are within or near the silicified zone and (2)coarse massive sphalerite veins (H Zone, B Zone) with high Ag and low Au that strike nearly at right angles to the silicified zone. A fine grained black mineral, possibly tourmaline is an important alteration mineral occurring as a pervasive and fracture controlled mineral in the silicified rocks. A sample has been taken for identification by EMPR.

Not tourmaline, — carbon (pyrobitumen?) TOS Sept. 8/96

The intersection of the Discovery Vein in the first drill hole is wider than the 2-3 metres seen on surface but is lower grade (3 meters at 0.4 opt on surface, vs 14 meters of 0.17 in core). Hole 3 tested the H-zone massive sphalerite showing with only 15-20 cm of massive sphalerite intersected. The drill was being moved to the fourth site at the time of our visit with several more holes planned. However, Gold Fields are interested only in 1,000,000+ oz targets and the Nizi may not measure up, despite these results.

SNOBALL

*Visited Noranda's **Snoball** project with Dorothe Jakobsen and George Cavey on August 26, guided by Mike Savell. A lower Jurassic? diorite intrudes well bedded tuffaceous siltstone. The area of interest is bisected by a NW fault. A higher structural level is indicated on the SW side of the fault by the absence of hornfels. Gold occurs in randomly oriented aspy-py-sph-gl veins with grades up to 100 gpt in the SW block. Across the fault, siliceous hornfels (minor epidote, no biotite) predominates and mineralization occurs as massive pods of pyrrhotite with minor chalcopyrite and gold in the 0.5-5 gpt range. The apparent absence of ore grade gold in this fault block suggests there is no depth potential to the high grade arsenopyrite veins in the SW block.

Abundant hornblende phyric dikes derived from the diorite stock cut the siltsone and hornfels. Comparison of Snoball to Eskay is limited to the Au-As plus base metal geochemical signature. The hornfels environment and the acicular hornblende diorite is more comparable to Red Mountain. We were not permitted to view the core. Drilling was on the ninth hole and indicated to likely be the last hole of the program. The drill is to remain on site pending analytic results.

LIMONITE (+ nickel?) NEW

*Visited Cyprus Canada's **Limonite** project 40km southwest of Smithers on August 28 with project geologist Dave Fleming. Surficial iron deposits (ferricrete, limonite) attracted exploration interest to a biotite-feldspar porphyry Bulkley intrusion for copper in the 1960's but Cyprus' target is a VMS deposit. The property is underlain mainly by Telkwa Formation andesite with lenses of schistose rhyolite (quartz sericite schist) and pyritic dacite. A pulse EM survey delineated a 6-channel