

## **BEN - 093F 059 NTS 93F/07E**

The Ben precious metal occurrence is located approximately 5 kilometres north of Tatelkuz Mountain and is accessible from the Kluskus-Ootsa forest service road and Yellow secondary logging road. The property, owned by BHP Minerals Canada Ltd., comprises 50 claim units that were explored during 1991 and 1992.

Mineralized outcrops were discovered during reconnaissance exploration for volcanogenic massive sulphide deposits in 1991 (Wesa and St. Pierre, 1992). Exploration focused on quartz-sulphide zones that are hosted by intermediate flows, related pyroclastics and siltstones of the Hazelton Group. These rocks are intruded by plutons of at least two ages: an Eocene biotite hornblende granodiorite, and an older (Jura-Cretaceous?) monzonite. The east-trending body of Eocene granodiorite underlies the northern half of the property and truncates the older rocks. A northwesterly trending, steeply southwest dipping foliation cuts the older rocks. Hazelton Group rocks are commonly hornfelsed near contacts with the intrusions and contain up to several percent biotite, which gives the rock a brown to purplish cast.

Precious and base metal mineralization occurs along a north-facing slope within foliated rocks 200 to 300 metres south of the contact with Eocene granodiorite. Three showings, the Hooter, Shawn and Creek showings, crop out along a trend of approximately 150°, over a strike length of 80 metres within a zone of quartz-biotite-altered felsic tuff. Mineralization appears to parallel the foliation at 140°-150°. Disseminated to locally semimassive quartz-sulphide veins or seams contain arsenopyrite, pyrite and pyrrhotite, and traces of chalcopyrite, galena and sphalerite. A 3.0-metre chip sample across the Hooter showing assayed 0.7 g/t Au, 95 g/t Ag and 0.2% Pb; a 10-centimetre arsenopyrite-pyrite-quartz vein in biotite monzonite assayed 3.7 g/t Au and 5.2 g/t Ag (Wesa and St. Pierre, 1992). These zones are also anomalous in arsenic, zinc, antimony and bismuth. The highest gold value recorded on the property was from a polymetallic float boulder that assayed 12.4 g/t Au, more than 200 g/t Ag, over 1% arsenic and lead, and anomalous levels of zinc, antimony and copper (Wesa and St. Pierre, 1992).

Molybdenum occurs in trace amounts throughout the altered monzonite, as disseminations and coatings on fractures. It is commonly accompanied by traces of pyrite, pyrrhotite and arsenopyrite. The porphyry potential of the property has not been explored by the company, although occurrences several kilometres to the north (CH and Chu) have been investigated for porphyry molybdenum and copper deposits.