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Premier 'Silbak'

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"THE SILBAK PREMIER GOLD-SILVER DEPOSIT"

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Silbak Premier Mine, 15 km north of Stewart, B.C. produced 4.7 million tons at 0.38 oz Au and 8.0 oz. Ag per ton. Exploration by Westmin Resources Limited has focused on the open pit potential of the richest area of the old workings mined prior to 1935. Current geologic reserves are 6.37 million tons at 0.060 oz Au and 2.52 oz Ag per ton. Exploration is complicated by the need to drill through open and caved stopes, and to incorporate stope outlines in reserve blocks.

Subvolcanic quartz K-feldspar hornblende plagioclase porphyry, emplaced into coeval andesite, is complexly distributed as several conformable and cross-cutting bodies that intersect at the deposit. Mineralized zones in the present reserve coincide with certain porphyry bodies and consist of silica ⁺ adularia ⁺ sulphide vein stockworks and breccia. The main past-productive zone is 1500 m long, 500 m down dip and 30-100 m wide, maximum widths occur where porphyry bodies converge.

Pyrite, sphalerite and galena are the most abundant sulphide minerals, argentite and electrum are thought to be the main silver and gold minerals. Due to changing proportion of ore types, metals are zoned such that silver content and Ag:Au decrease and base metals increase with depth and south along strike in the deposit. Ore types range from siliceous, low sulphide silver-gold ore (less than 500 ppm Pb + Zn, Ag:Au 100:1) to semi-massive base metal sulphide ore (Ag:Au of 10:1). Pervasive sericite forms a halo to siliceous ore, but not semi-massive sulphide ore, and is flanked by feldspar-destructive carbonate alteration.

Setback Premier Paul Wadzak

210 - 186 Ma dated pegmatite
186 dacite

are zones N & W trending, follow propyl allts
Sd box are = malbaud clasts + qtz / chlorite / sulphides
min zone is low sulphide ore < 30% sulph
Pb+Zn = 12% max. Bismuth ore 15% Pb+Zn per
each of the

Wadzak zone 30% Pb+Zn. Multiple boxes in massive
sulphide ore.

min and host contacts of propylite cell (dacite)
some host andesite is mineralized

Pg-sp-ga more sulphide

no by Ag in ga

locally Au in pg, mainly as electrum

Ag mineral very fine grained. Fe, polyb & argentite
polyarsenite

multiple phases of qtz & Ksp in banded

part are of qtz-calc-chlor-phosphates

Sd box zones of the shield, open space Fe-rich

x1 kind ways, symm cross-section banding.

Pg/Au decrease with depth, toward Wadzak

1100 → 1120 → 115 at depth

Kc Pb+Zn increase with depth, to W.

Qtz-Ksp alter in bed rocks, close to ore

Devs. by propylite sheets - most widespread

Ksp repl. plg. massive breccia - sheets of old

andesite. Qtz veins superimposed

plg - carbonate alter rims sheets of ore
20-25% calcite