

82FNW 234

002513

COLUMBIA GOLD MINES LTD.

15th Floor, 675 W. Hastings Street, Vancouver, B.C., Canada V6B 1N2
Facsimile (604) 687-2419 • Telephone (604) 687-1658

TILLICUM GOLD PROPERTY

Columbia Gold Mines Ltd. (formerly Esperanza Explorations Ltd.) owns 100% of the Tillicum Mountain Gold Property located in southeastern British Columbia. Columbia acquired the property in late 1980. Since then, the Company has progressed the property to an advanced stage of ore reserve definition through a \$10 million program of surface and underground exploration. Exploration to date has defined 10 skarn-hosted precious metal zones on the property, with the majority of work directed to the Heino-Money and East Ridge deposits. Combined proven to drill indicated reserves at the Tillicum Property presently total 507,000 tons grading 0.32 ounces per ton gold.

The property covers a portion of a roof pendent at the northwest end of the 150 mile-long arcuate belt of Rosslund Group volcanics. This belt is host to several gold mines and prospects with total recorded production over the past 80 years in excess of 4.0 million ounces of gold. The property is underlain by a sequence of Upper Paleozoic Milford Group volcanic-sedimentary wackestones overlain by Jurassic Rosslund Group andesitic flows and tuffaceous siltstones. Intrusive into the above succession are stocks and sills of syenite to diorite porphyry. All units have been metamorphosed to lower greenschist facies and intruded by Cretaceous-age granodiorite of the Goat Canyon and Halifax Creek batholiths. Late lamprophyre dyke swarms intrude Jurassic and older assemblages.

Gold-silver skarns within the Tillicum Mountain Property are hosted in carbonate-free tuffaceous sediments, tuffaceous volcanics and altered intrusives. All skarns are spatially related to diorite and quartz monzodiorite intrusives and often cross-cut different rock units along strike or to depth. Higher grade precious metal values within the skarn zone appear to be shear-related and are associated with silica injections within a broad envelope of calc-silicate alteration.

Native gold occurs within the skarn assemblages as 25 micron disseminations to 1 centimeter coarse flakes. Skarns also contain variable amounts of pyrrhotite, pyrite, sphalerite, galena, as well as traces of chalcopyrite and tetrahedrite. Petrographic studies of polished thin sections indicate that the gold is contemporaneous with pyrrhotite, pyrite, sphalerite, galena mineralization and predates minor amounts of arsenopyrite and tetrahedrite crystallization.

The Heino-Money deposit has now been demonstrated by drilling and underground exploration, to have a reserve potential of 50,000 tons grading 1.0 ounces per ton gold. Within this reserve, a mining reserve has been calculated of 22,000 tons with a diluted grade of 0.86 ounces of gold per ton using a 0.2 oz/ton gold cut-off. The mining reserve is outlined in four

shoots that occur in a near vertical gold-bearing skarn structure which averages about 6 feet in width. Additional reserve potential occurs between the delineated shoots as well as along strike and to depth. Metallurgical testing of a 3700 ton bulk sample mined from the Heino-Money zone in 1985 and 1986 indicated that in excess of 92 percent recovery can be achieved in a conventional gravity flotation process.

The East Ridge deposit lies approximately 1000 feet east of the Heino-Money zone. Exploration completed to date comprises over 53,000 feet of diamond drilling in 111 holes together with about 1000 feet of exploratory underground drifting. Total drill indicated and inferred reserves currently stand at 1,306,000 tons grading 0.17 oz/ton gold. Within this reserve a drill-indicated reserve has been established of 485,000 tons with an in situ grade of 0.30 oz/ton gold. Gold mineralization occurs in sub-parallel skarn structures inclined at about 55 degrees and varying in width from 5 feet to over 15 feet. The deposit, now traced over a strike length of 3500 feet and to a depth of 1200 feet, remains open and holds good possibilities of increased tonnage.

Initial exploration drilling was carried out on the Grizzly Zone, a third skarn-hosted gold zone at Tillicum Mountain located within 1 mile of the East Ridge and Heino-Money deposits. Drilling along a strike length at 1500 feet intersected widths of 48 feet grading 0.07 ounces per ton gold. Higher grade sections assay from 0.3 to 0.58 ounces per ton gold over widths of 4 feet.

Skarn zones on the Tillicum Mountain property, with the exception of the Silver Queen zone, are associated with shear zones and silica alteration in volcanic and intrusive host rocks. The term skarn, however, is applied to these zones because they contain a significant proportion of calc-silicate minerals. The gold-silver deposits on the Tillicum Mountain property should be classified as "Greenstone - hosted deposits" with prominent calc-silicate alteration, loosely called "skarns".

May, 1990

shoots that occur in a near vertical gold-bearing skarn structure which averages about 6 feet in width. Additional reserve potential occurs between the delineated shoots as well as along strike and to depth. Metallurgical testing of a 3700 ton bulk sample mined from the Heino-Money zone in 1985 and 1986 indicated that in excess of 92 percent recovery can be achieved in a conventional gravity flotation process.

The East Ridge deposit lies approximately 1000 feet east of the Heino-Money zone. Exploration completed to date comprises over 53,000 feet of diamond drilling in 111 holes together with about 1000 feet of exploratory underground drifting. Total drill indicated and inferred reserves currently stand at 1,306,000 tons grading 0.17 oz/ton gold. Within this reserve a drill-indicated reserve has been established of 485,000 tons with an in situ grade of 0.30 oz/ton gold. Gold mineralization occurs in sub-parallel skarn structures inclined at about 55 degrees and varying in width from 5 feet to over 15 feet. The deposit, now traced over a strike length of 3500 feet and to a depth of 1200 feet, remains open and holds good possibilities of increased tonnage.

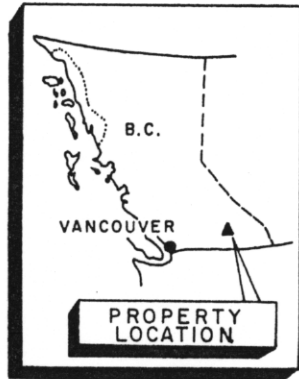
Initial exploration drilling was carried out on the Grizzly Zone, a third skarn-hosted gold zone at Tillicum Mountain located within 1 mile of the East Ridge and Heino-Money deposits. Drilling along a strike length at 1500 feet intersected widths of 48 feet grading 0.07 ounces per ton gold. Higher grade sections assay from 0.3 to 0.58 ounces per ton gold over widths of 4 feet.

Skarn zones on the Tillicum Mountain property, with the exception of the Silver Queen zone, are associated with shear zones and silica alteration in volcanic and intrusive host rocks. The term skarn, however, is applied to these zones because they contain a significant proportion of calc-silicate minerals. The gold-silver deposits on the Tillicum Mountain property should be classified as "Greenstone - hosted deposits" with prominent calc-silicate alteration, loosely called "skarns".

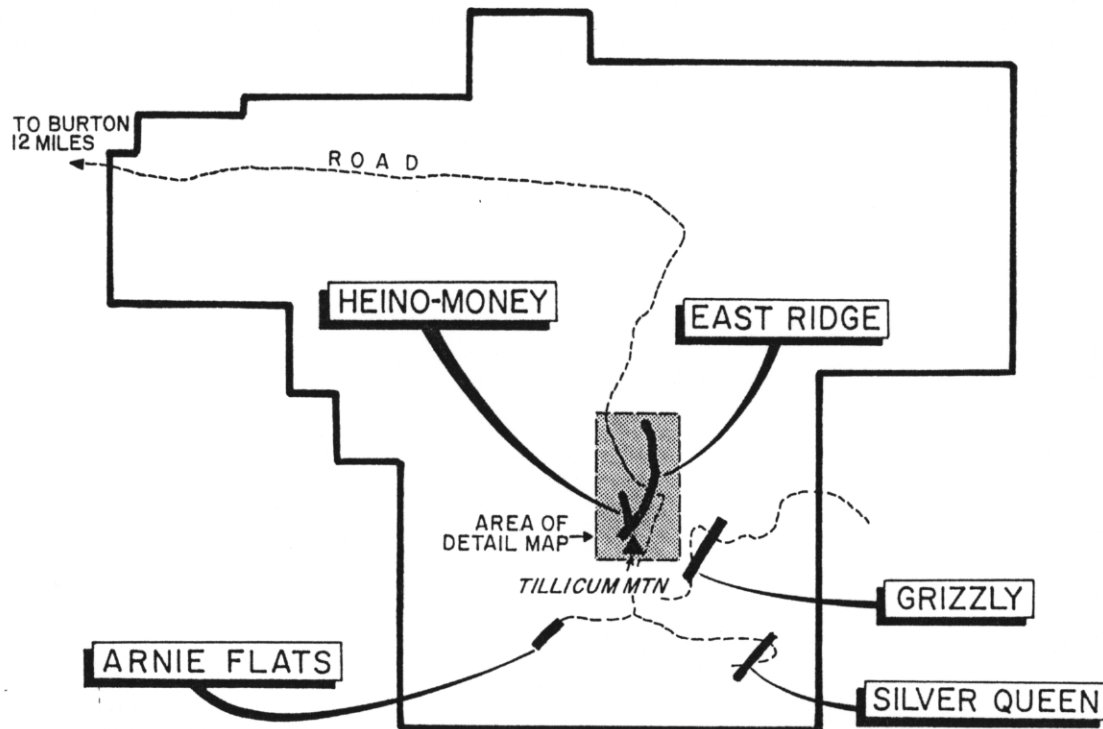
May, 1990

COLUMBIA GOLD MINES LTD.

TILLICUM MOUNTAIN PROPERTY GOLD — SILVER DEPOSITS



PROPERTY MAP



GOLD RESERVES

