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Cominco - Delaware SNIP Gold Deposit, Iskut River, N.W. British Columbia

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The Snip property, located on the lower slopes of Johnny Mountain on the south side of the Iskut River, lies 110 km NW of Stewart, B.C. and 70 km east of Wrangell, Alaska.

The first claims on Johnny Mountain date from 1910 and Cominco prospectors staked and prospected claims in the area in 1929. Native gold was first discovered by a Cominco exploration crew prospecting the ground around Johnny Mountain for base metals in 1965. Trenching in 1966 revealed a strong calcite-quartz-pyrite-sphalerite-galena-native gold-chlorite-sericite shear vein hosted by intensely carbonate-altered siltstone. Assays of 1.36 oz/ton Au over 11 feet, 0.44 oz/ton Au over 18 feet and 6.54 oz/ton Au over 4 feet were obtained over a 60-foot strike length. After restaking in late 1980, Cominco carried out geological mapping, soil geochemistry and trenching in the 1981 to 1983 period and confirmed the existence of high gold grades and strong gold geochemical anomalies in soil - including extensive areas of 200 to 1000 ppb gold.

In early 1986, Cominco Ltd. signed an option agreement with Delaware Resources Corp. During 1986-1988, programs financed by Delaware led to the completion of 109 surface diamond-drill holes (22,400 m), 147 underground holes (11,275 m) and 2,335 m of underground drifting, raising and crosscutting on two levels. Total Exploration Expenditures to feasibility (1981-1988) were \$13.6 million.

The Twin Zone is a 3 to 25 foot-thick, discordant shear vein cutting a thick sequence of Lower Jurassic(?) and siltstone. It has been traced over a strike length of 3500 feet and through a vertical range of 1500 feet. Underground drifting on the Twin Zone shear has demonstrated the existence of two distinctly different ore types. Type A ore occurs in a complex banded shear vein composed of alternating bands of massive calcite: heavily disseminated to massive pyrite; thin bands of biotite-chlorite and crackle quartz. Pyrite averages 15 percent in Type A Twin Zone mineralization. Other sulphide minerals include pyrrhotite, chalcopyrite, sphalerite, galena and arsenopyrite. Molybdenite is also common locally. Minor to trace amounts of bismuth and lead tellurides, including tellurobismuthite, cosalite, hessite and volynskite have been observed in polished thin sections.

Polished sections reveal that native gold is in free form. It occurs with gangue minerals (biotite, sericite, quartz, carbonate) and commonly at the margins of pyrite, arsenopyrite and Pb-Bi tellurides. It also fills late-stage fractures in pyrite and arsenopyrite.

The current ore reserve estimate comprises 1.57 million short tons of 0.64 ounce gold per ton in indicated and inferred categories. The reserve includes 25 percent mining dilution at zero grade, based on a minimum mining width of 6 feet. Individual assays greater than 5 ounces per ton have been cut to 5 ounces per ton. Metallurgical tests on underground bulk samples and drill core composites spaced throughout the ore reserve produced combined recoveries (gravity + cyanidation) of 91 to 98 per cent gold.

Underground development of the deposit is now in progress and preliminary engineering for permitting of mill construction, tailings disposal sites and surface facilities is underway in preparation for late 1989 start-up of a 330