

CANADIAN GOLD - ASPECTS OF GEOLOGY AND PRODUCTION

*David J. Mossman
Mount Allison University
Sackville, New Brunswick, E0A 3C0*

Canada maintains third place position world wide as production continues to rise. Production in 1986 will for the first time exceed 100 tonnes. Over 60 mines are active and several others are about to start up. Production averages about 50,000 Troy ounces/year. Lode deposits with grade averaging about 10g/tonne account for about 75 percent of present production. The balance, except for about 4 percent from placers, is a by-product

of base metal mining. All known types of gold occurrences exist in Canada, but only a few selected types are economic. By far the most productive are lode deposits of Archean greenstone belts in the Slave and Superior provinces. Contrasting genetic schemes for these center on primary exhalative processes versus deep sub-crustal extraction with strong structural control.