

The Bralorne Mine Complex – Plumbing Insights and Opportunities

Renowned as one of the highest-grade longest producing mines in British Columbia, the three historic mines of the Bralorne Mine Complex, Bralorne, Pioneer and King produced a total of 4.2Moz at an average recovered grade of 17.7g/t. Production closed in 1971 due to subdued gold price (US\$35/oz, US\$220/oz in current dollar value). On average, production at the Pioneer and Bralorne produced 2,300 ounces per vertical metre mined.

Bralorne is a Phanerozoic Orogenic gold vein system. Also known as a mesothermal vein deposit, Bralorne is analogous to the Motherload deposit of California, the Cariboo Deposit in BC (Barkerville Gold Mines) and the Curraghinalt deposit of Northern Ireland.

The gold-quartz veins form an approximate en echelon array. They have strike lengths of as much as 1,500 metre between bounding fault structures, and extend to at least 2,000 metre in depth, with no significant changes in grade or style of mineralization recorded. Ores consist mainly of ribboned fissure veins with septa defined by fine-grained chlorite, sericite, graphite or sulphide minerals. Recent re-examination of vein and ore shoot geometries has shed new light on mineralization controls and yielded powerful vectoring tools now being employed by the exploration team.

Veins are dominantly composed of quartz, with minor carbonate minerals, mainly calcite and ankerite, and lesser amounts of chlorite, sericite, clay altered mariposite, talc, scheelite and native gold. Sulphides are present and, although locally abundant, make up less than 1% of total vein volume. Pyrite and arsenopyrite are the most abundant sulphides with lesser marcassite, pyrrhotite, sphalerite, stibnite, galena, chalcopyrite and rare tetrahedrite.

A district scale consolidated land package of 11,700 hectares covers 30 km of the Cadwallader Break, the main conduit for gold mineralisation in the Bralorne District. Forty six small mines and vein occurrences have never been subject to modern exploration techniques. Talisker is currently compiling the wealth of historic exploration data and building a comprehensive 3D model to aid brownfields targeting in the vicinity of the Bralorne Mine Complex.

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