



What is an “Epizonal” Orogenic Gold Deposit?

An Orogenic Gold deposit is a type of hydrothermal deposit. More than 75% of the gold deposits throughout history belong to this class of orogenic gold deposits. Regional scale structural domains are the primary control for location of orogenic gold mineralization. The structures are the result of continental collision and mountain building (“Orogeny”), and hence the gold-deposit classification. These structures control the regional scale transport of gold-bearing fluids and variations in the structures control the depositional process for the resultant gold deposit.

In these domains, gold-bearing fluids precipitate at an upper-crustal level between 3 and up to 20 km depth forming vertically extensive gold-mineralized zones over both the shallower and deeper levels. “Epizonal” Orogenic gold deposits are those orogenic deposits formed at the shallowest level of deposition (less than 3 km depth) or a lower pressure/temperature regime and are typically associated with brittle deformation, breccias and deposition of antimony-bearing minerals.

The following is a session on “**Orogenic Gold: Deep and Epizonal Systems**” organized during the PDAC 2024 conference in March 2024. The two important overview talks are by Richard Goldfarb and David Rhys, experts on these types of systems.

<https://vimeo.com/925848497/524fffd3f8>

Orogenic overview talks are:

Richard Goldfarb – “**Orogenic Gold: What We Know and What is Controversial**” - 3 to 48 minutes – the discussion on antimony association and the Bridge River Camp (location of **Endurance’s Reliance project**) is from **29 to 32** minutes

David Rhys – “**Epizonal Orogenic Gold: Definitions and Distribution**” – 1 hr 34 min to 2 hr 6 min – the discussion on Fosterville Australia, the Bralorne Camp and the **Endurance’s Reliance BC Project** is from **1hr 57 min to 2 hr 5 min**