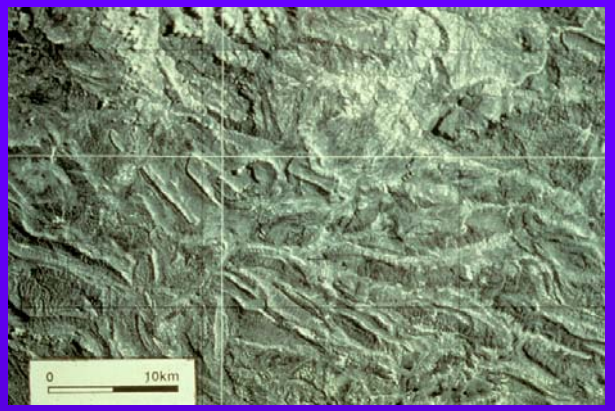
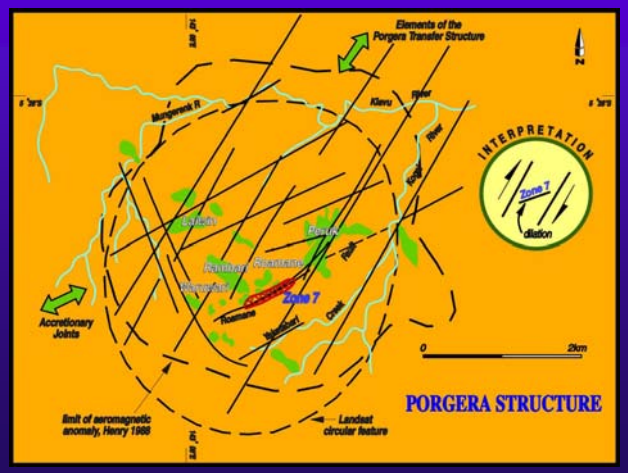
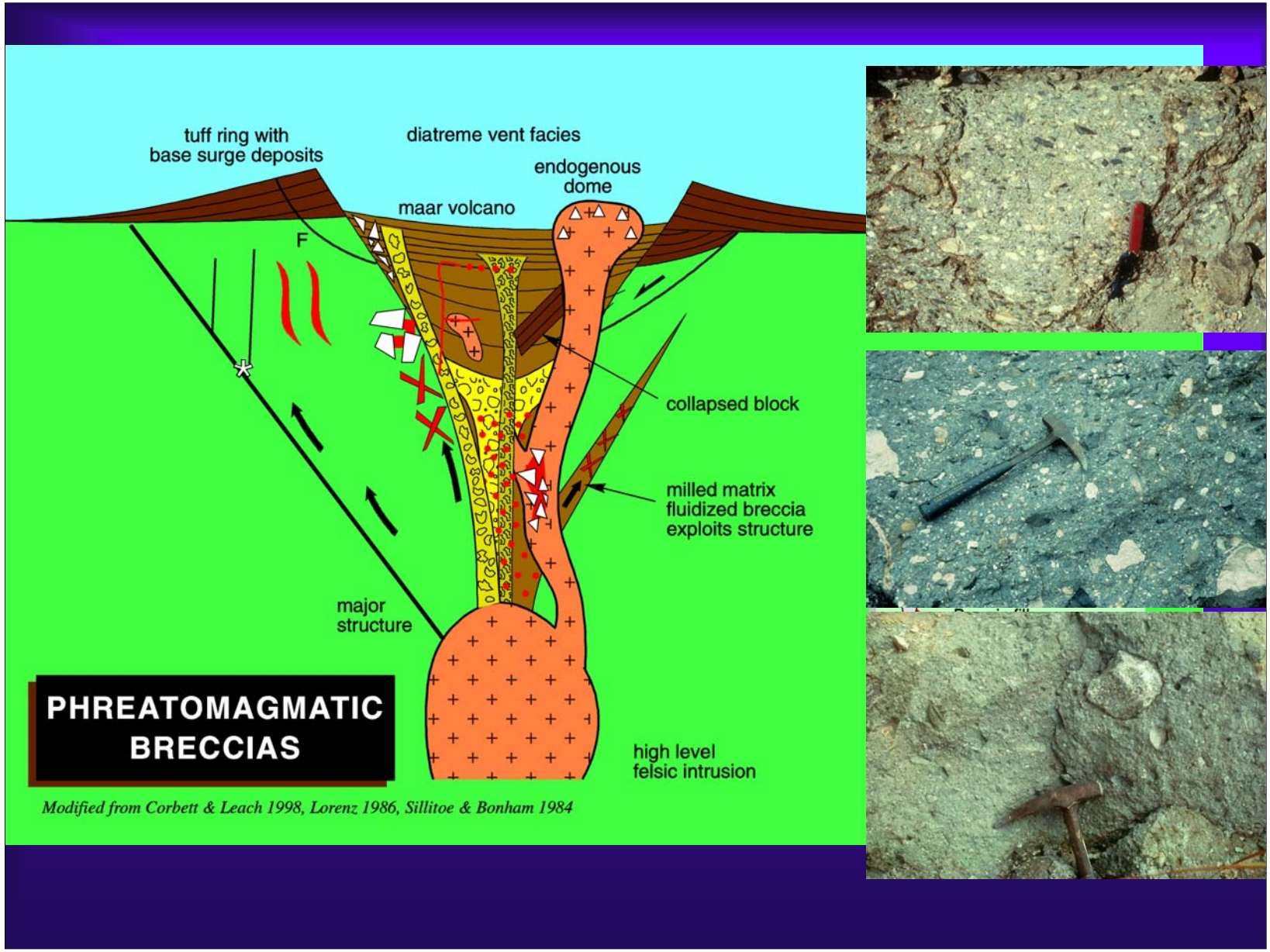
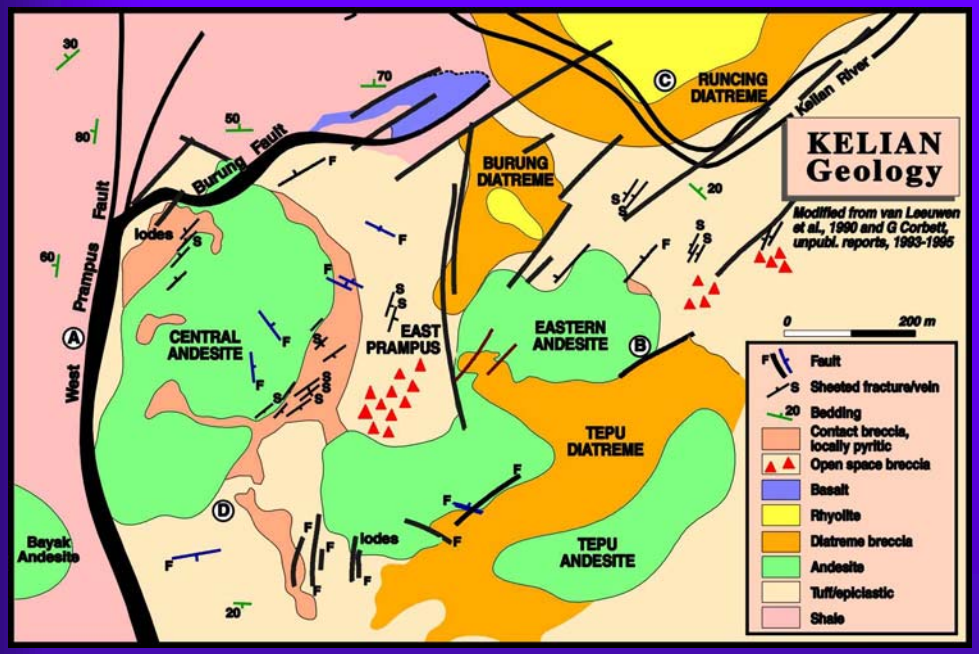
Porgera

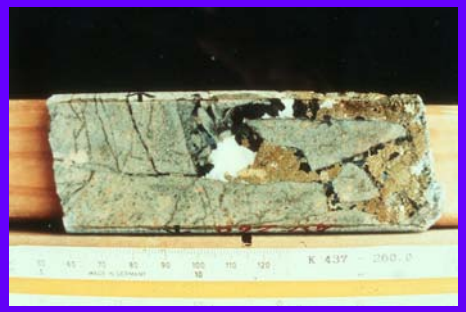


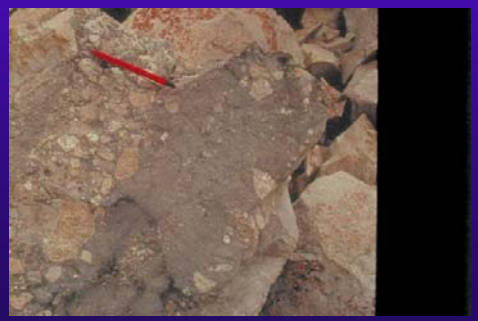




Kelian

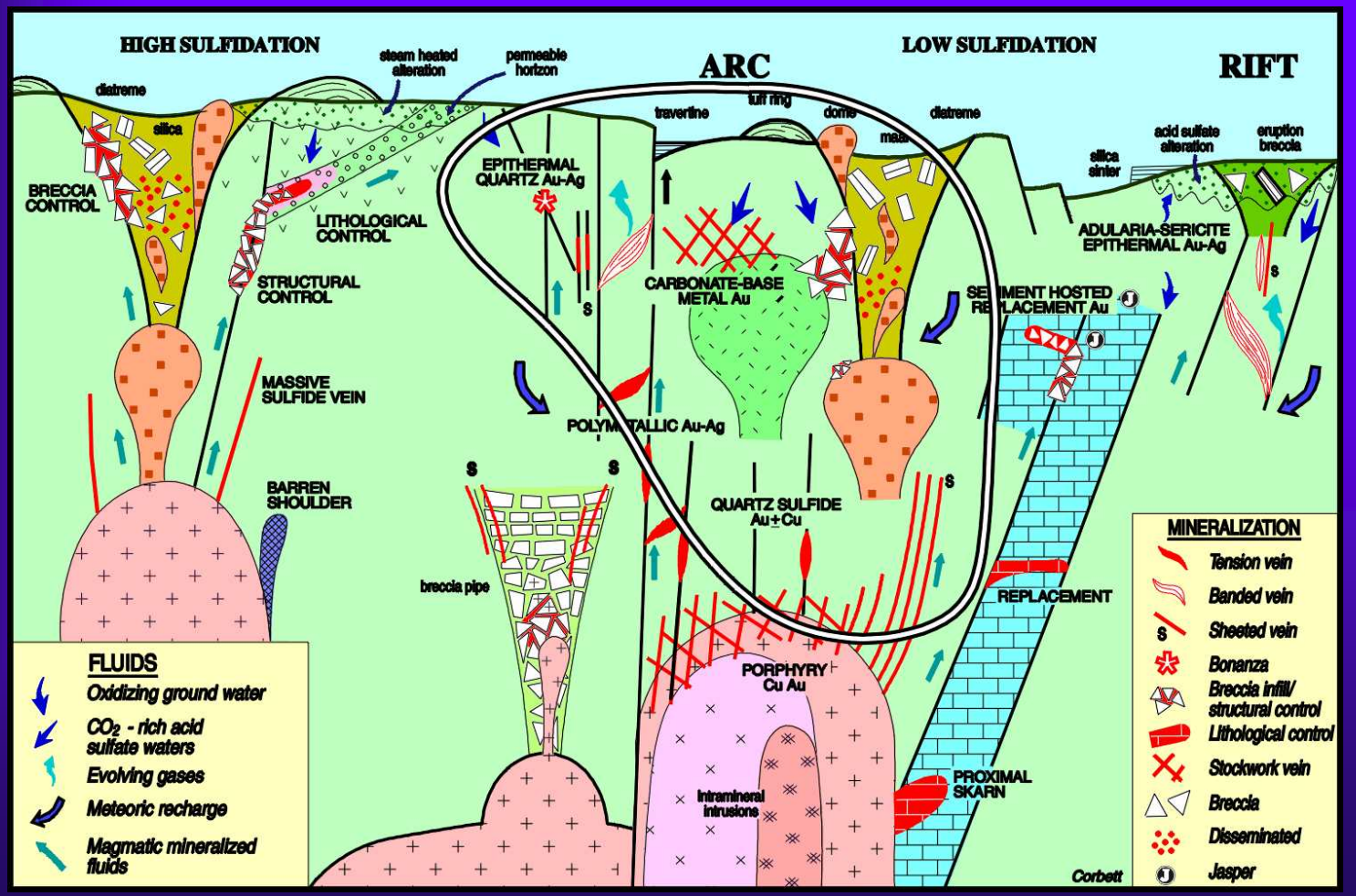






Sheeted veins at depth pass upwards to open space breccia

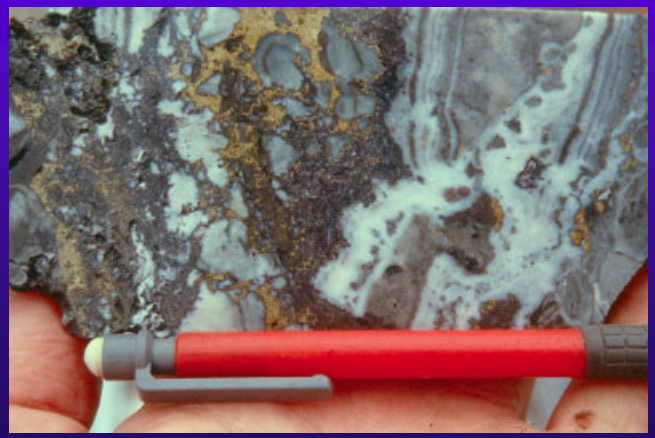
Conceptual Model for Styles of Epithermal Gold-Silver and Porphyry Copper Mineralisation



Polymetallic Au-Ag

Hadleigh Castle, Queensland

Caylloma, Peru



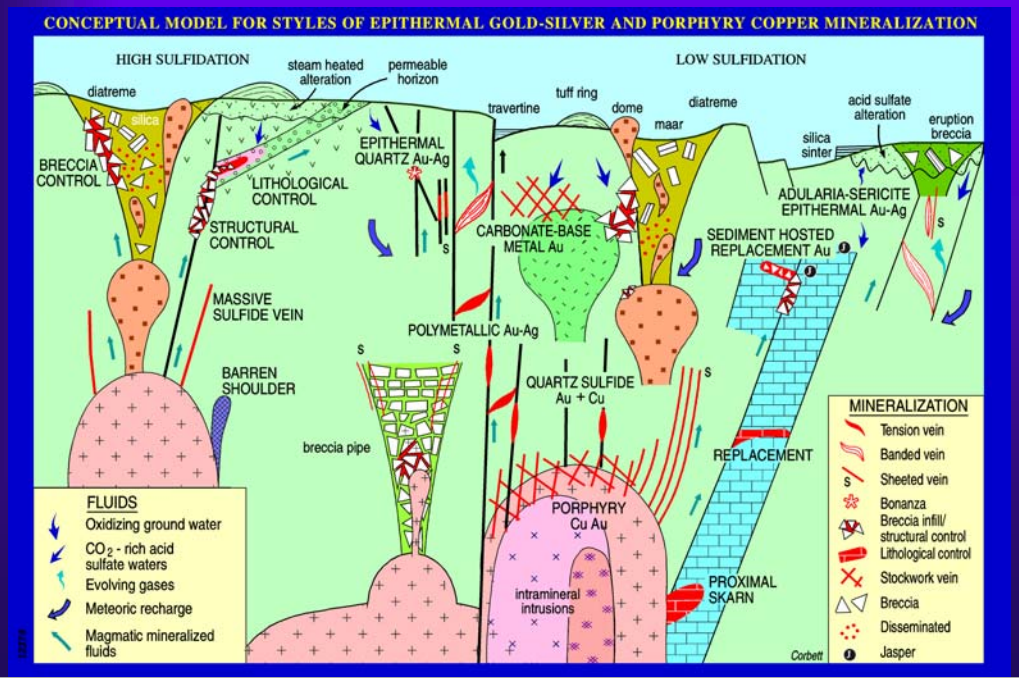
Parkers, Mineral Hill, NSW

Arcata, Peru

Polymetallic Au-Ag

Banded Adularia-sericite versus Polymetallic

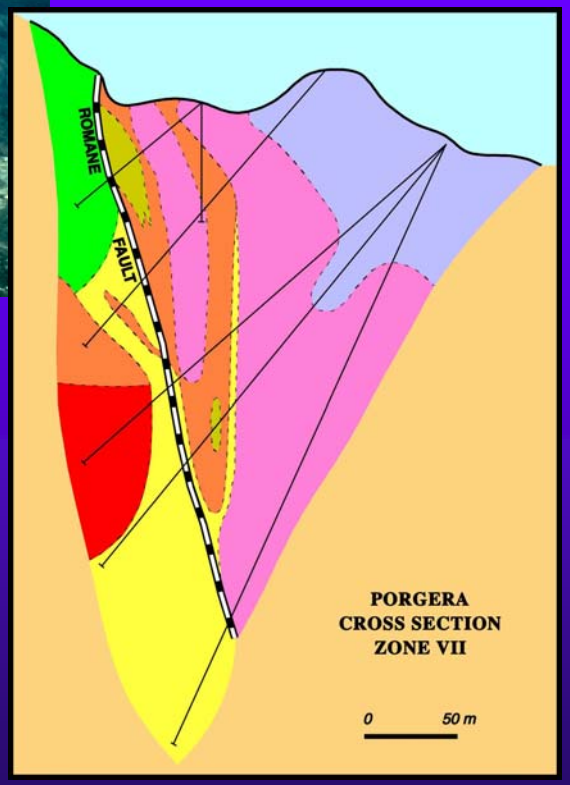
Golden Cross, NZ,
Adularia-Sericite



Peru, Polymetallic Veins

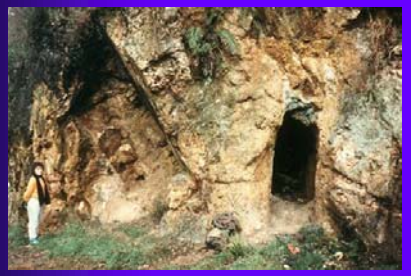
Epithermal Quartz Au-Ag

Porgera Zone VII



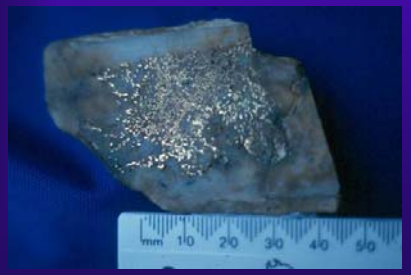
Bonanza gold

Thames Goldfield New Zealand

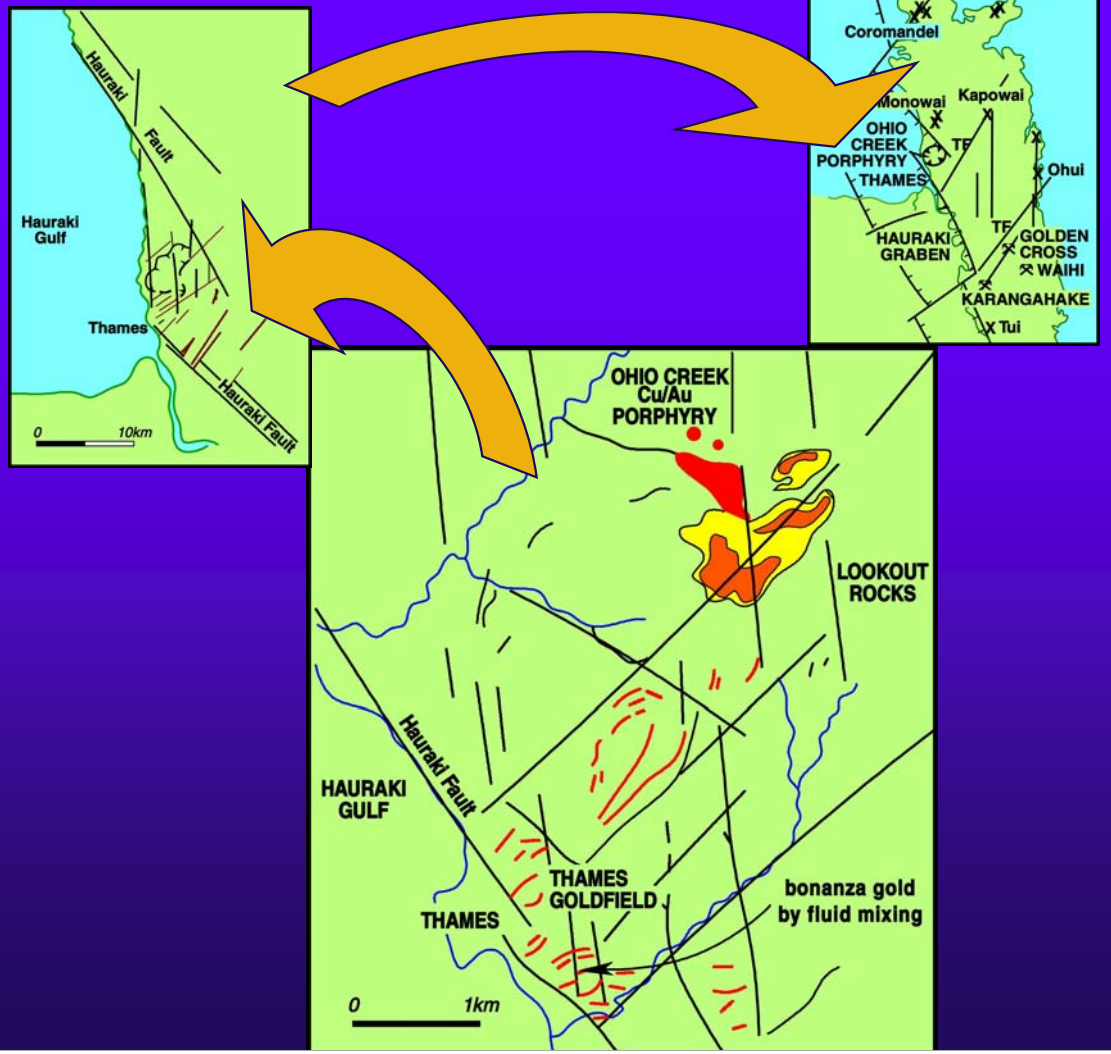


Quartz reefs and faults

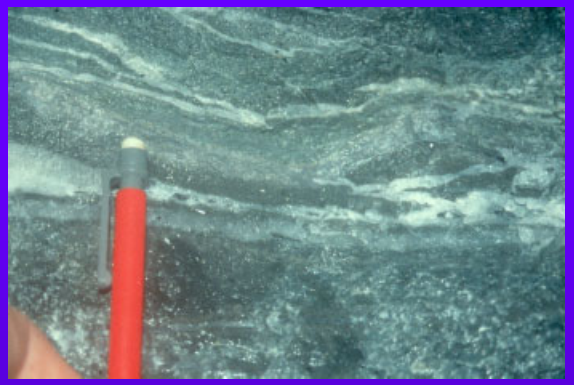
Quartz vein breccia



Bonanza gold



Emperor Gold mine

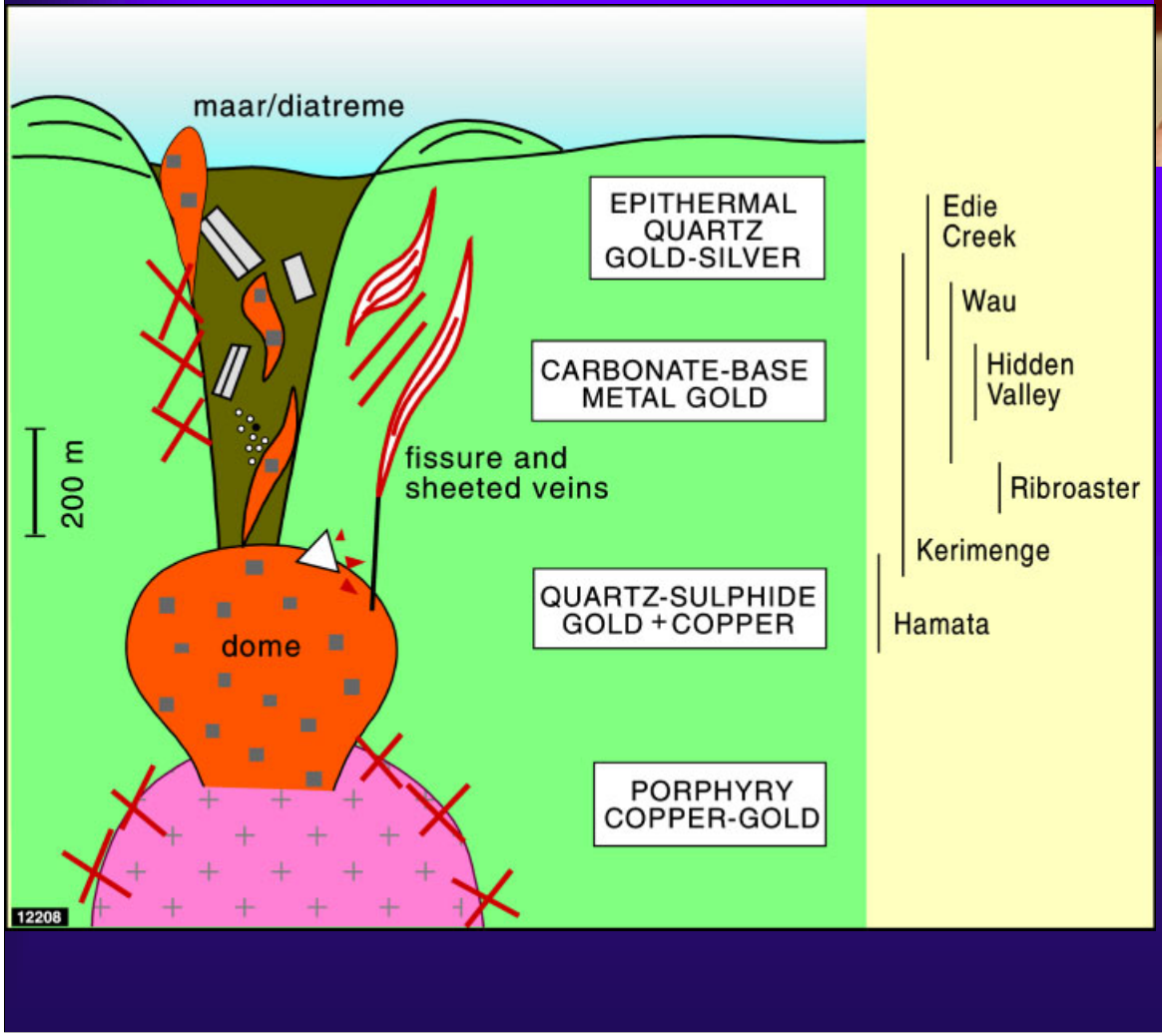


Flatmake

Telluride breccia matrix

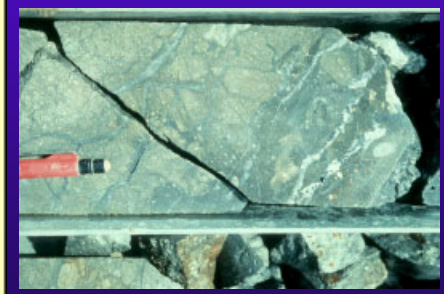
Gold overprints quartz-sulphide

Edie Creek



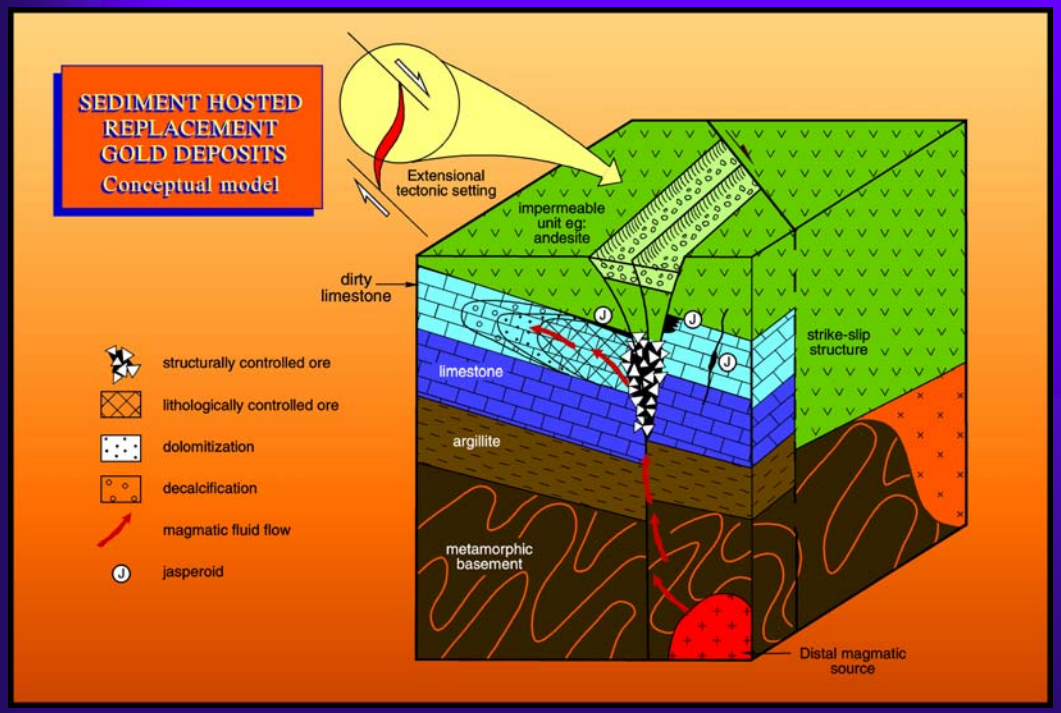
Edie Creek

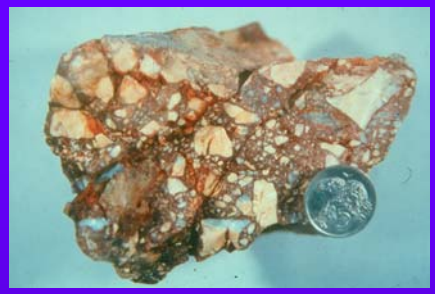
Upper Ridges, Wau

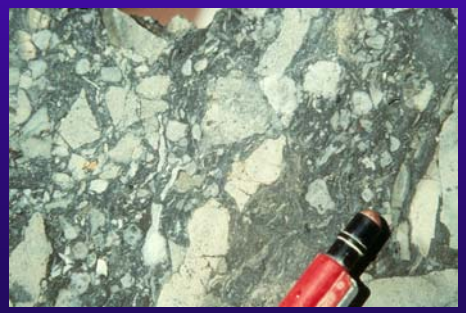


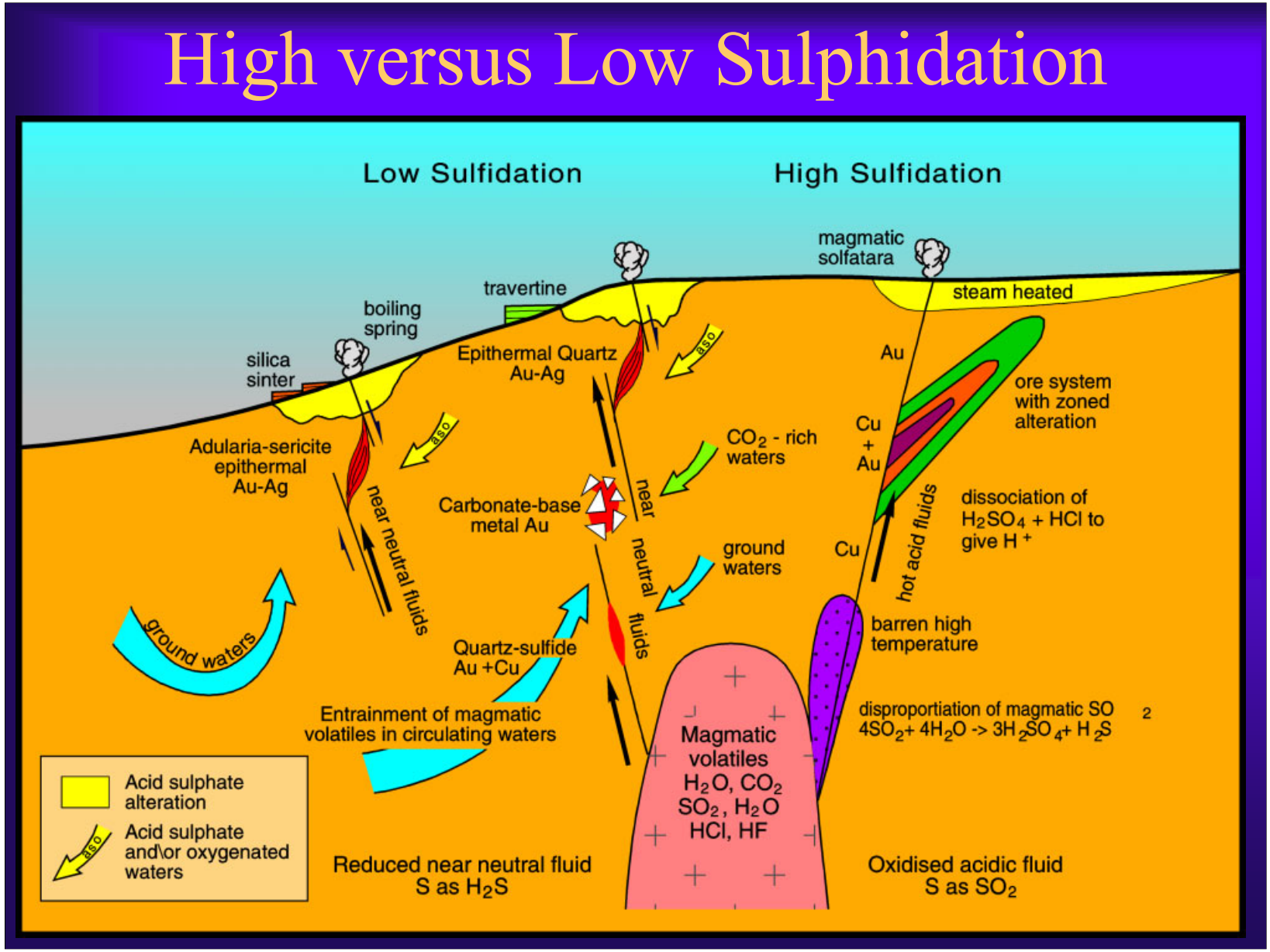
Hamata

Sediment Hosted Replacement Gold Structural and Lithological Control

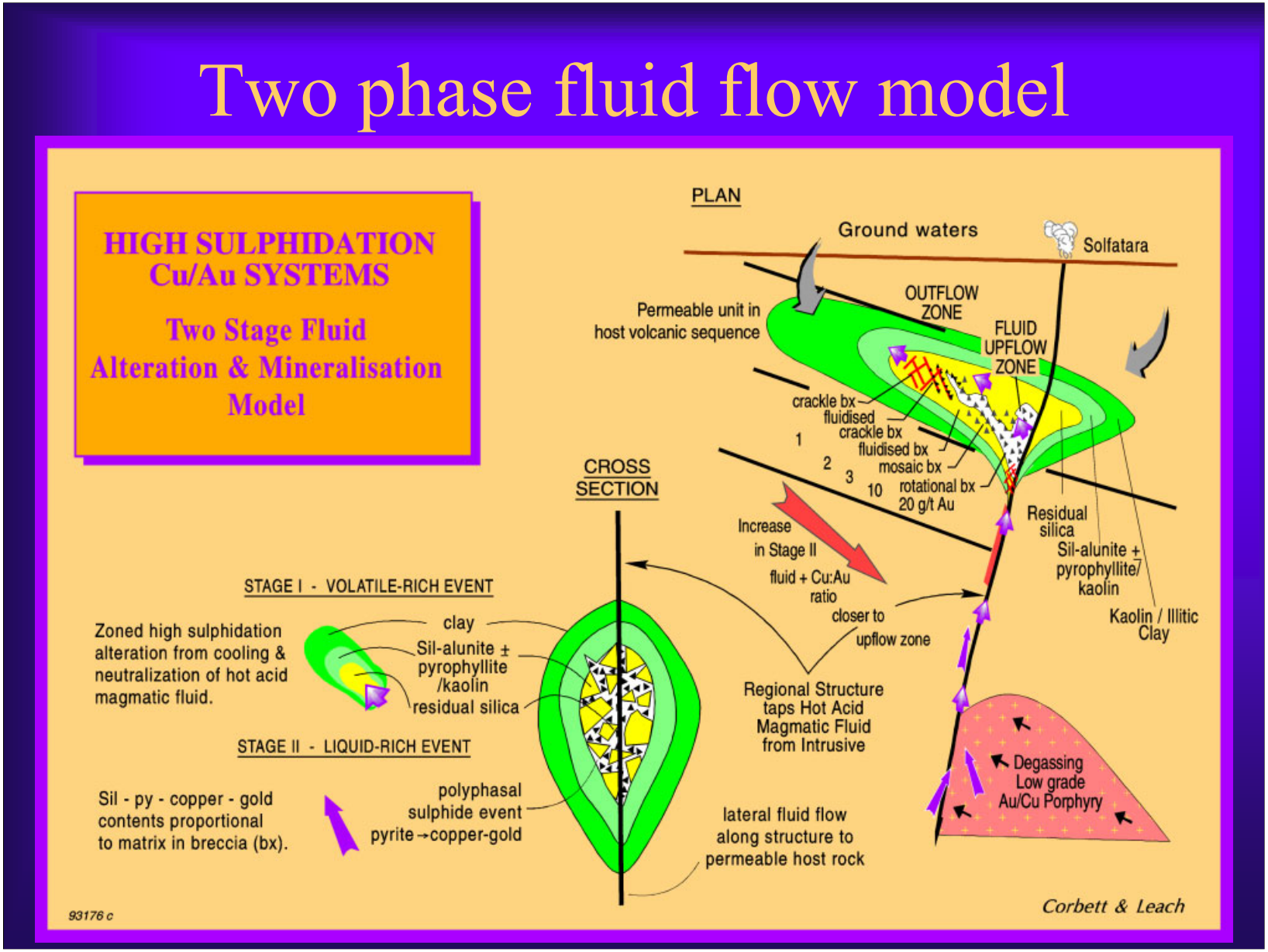








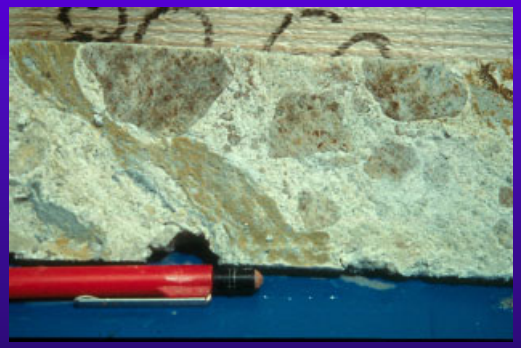
Two phase fluid flow model

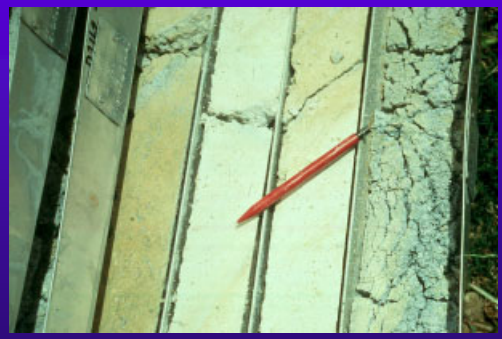


Zoned acid alteration

Del Carmen, Argentina

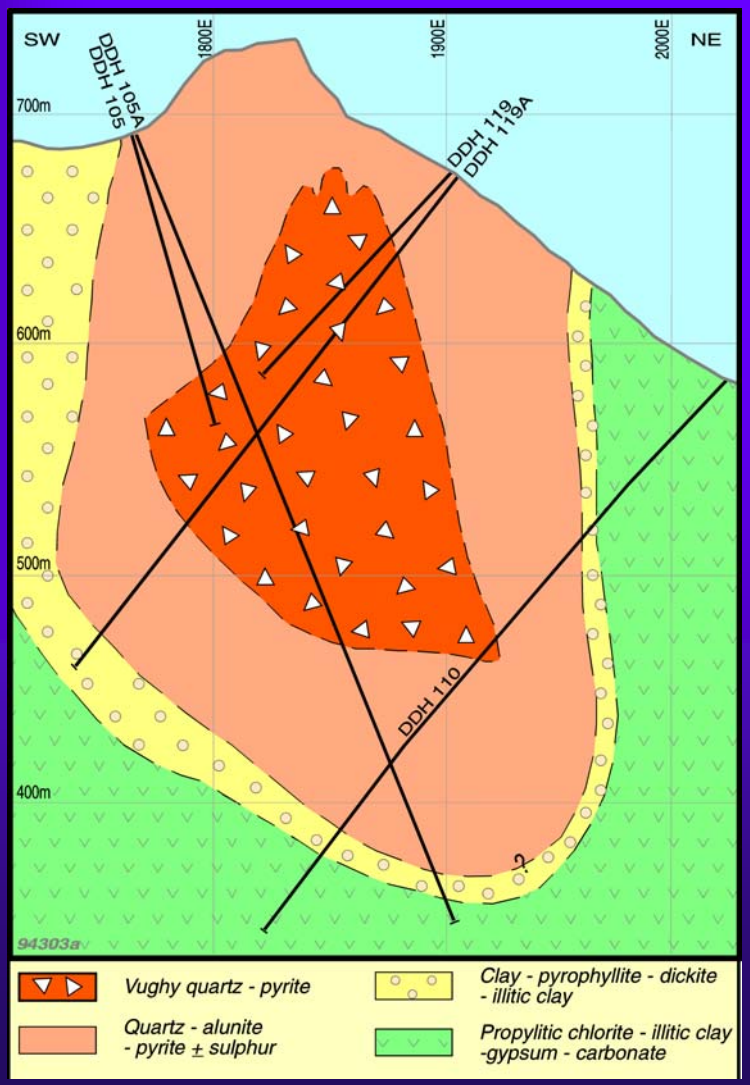
El Indio, Chile





Sappes, Greece

Alteration cross section - Nena



Mineralization

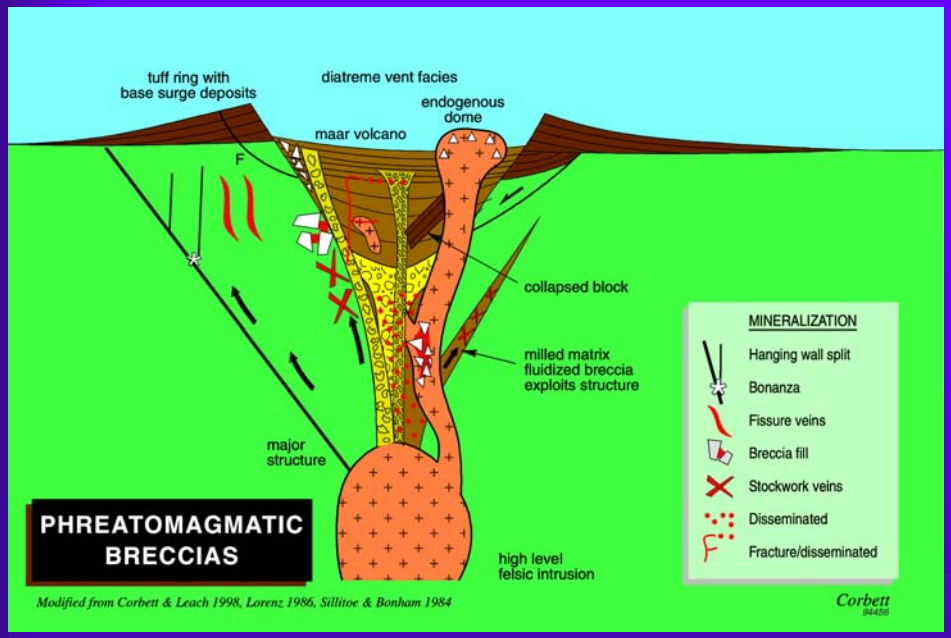
Mt Kasi, Fiji

El Indio, Chile

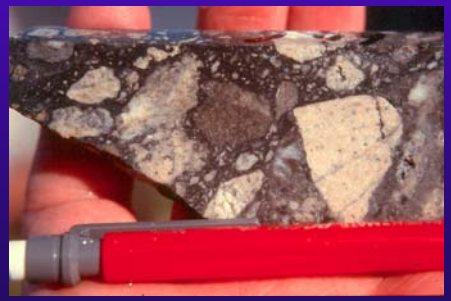
Maragorik, PNG

Yanacocha, Peru

Breccia



Pascua, Chile



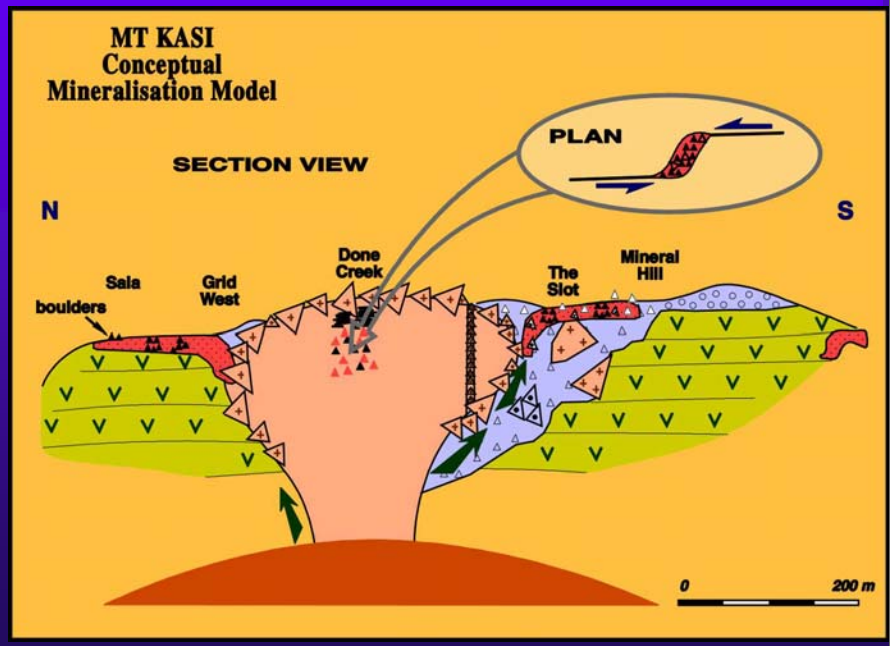
Lepanto, Phillipines

Yanacocha, Peru

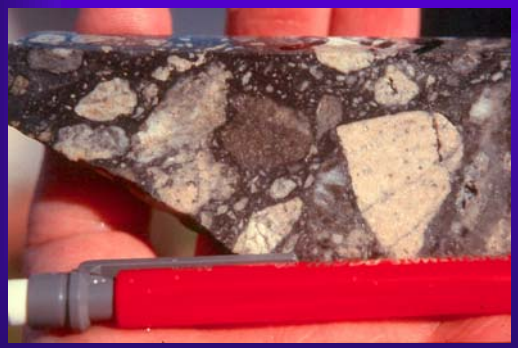
Veladero, Argentina

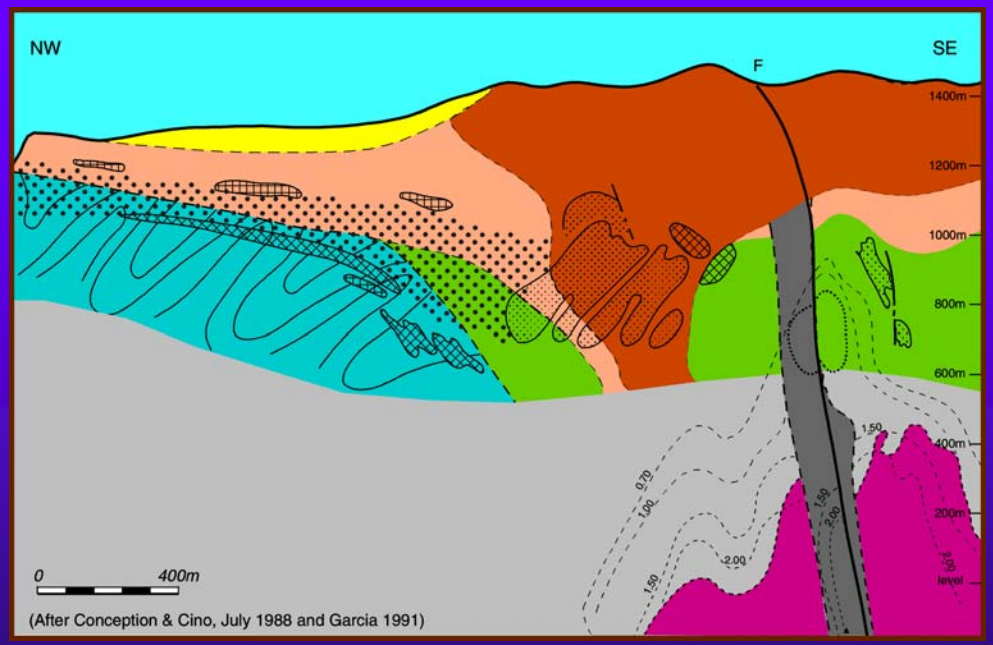
High Sulphidation Cu-Au±Ag

Mt Kasi – Dome Association



Lepanto





Conclusion