

### **Discovery and Geology of the Bukit Pasir Cu-Au Porphyry Deposit, Reko Diq District, Baluchistan – Pakistan**

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Bukit Pasir is a large, partially covered copper-gold porphyry system located approximately four kilometers northeast of the Western Porphyries orebodies, within the western Chaghi district and the broader Tethyan magmatic arc.

Copper–gold mineralization is hosted within multiphase quartz diorite porphyry stocks that intrude a Miocene volcano-sedimentary sequence of the Reko Diq Formation. The system is characterized by a well-developed and laterally extensive early A- and B-type porphyry quartz vein stockwork exceeding 700 × 500 meters. A broad leached cap was identified in trenches, although surface exposure is limited. This shallow zone (≤ 40 meters) transitions downward into a chlorite–sericite alteration assemblage, which grades into an early secondary biotite and K-feldspar (potassic-type) mineral assemblage at depth. Shallow mineralization (40-200 meters) is generally low grade, dominated by pyrite with minor chalcopyrite, overprinting earlier chalcopyrite and bornite mineralization. At depths between 200 and 250 meters, copper and gold grades increase significantly and are associated with a chalcopyrite-bornite assemblage within potassic-type alteration. Locally, metal grades increase up to 2% copper and 1 g/t gold in deeper intercepts. The early hypogene mineral assemblage is overprinted by a late hydrolytic, high-sulfidation event, which locally enhances copper and gold grades, characterized by a bornite–chalcocite–covellite-pyrite mineralization.

Preliminary modelling suggests Tier 1 potential, with a conceptual exploration potential exceeding seven million tonnes of contained copper and nine million ounces of gold at average grades of 0.50% Cu and 0.20 g/t Au. On a contained-metal basis, Bukit Pasir is broadly comparable in scale to individual Western Porphyries orebodies such as H15 or H14.