









Resource drilling operations in H14 and H15 porphyry complexes





Reko Diq H14-H15 deposit is a classic example of dynamic and short lived cluster of multiple porphyry systems accompanied by successive hydrothermal events with distinct cycles of Cu-Au mineralization.

The H14 - H15 PCD deposit is characterized by gold rich Cu-Fe-sulphide mineralization associated with hydrous, oxidized, low potassium, calc-alkaline intrusions of quartz diorite to granodiorite composition. The porphyry stocks are composite, with early well mineralized porphyry PFB1 is being intruded by inter-mineral PFB2 and late stage PFB3 and PFB4 porphyry phases indicating episodic intrusion of porphyry stocks (Sillitoe 2000).

Reko Diq H14-H15 PCD has a typical porphyry style alteration distribution, consisting of a series of overlapping hydrothermal alteration zones. The earliest high temperature potassic alteration of biotite + magnetite is followed by main stage biotite + K-feldspar + magnetite. The system then evolved into a transitional stage sericitic alteration and late stage chlorite + sericite + hematite assemblage related to D-veins. The system is overprinted by a low temperature intermediate argillic alteration.

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Hypogene Cu-Au mineralization at Reko Diq H14-H15 deposit is developed below an oxide zone of 15-25 meters. Gold bearing Cu-Fe-sulphides (pyrite chalcopyrite + bornite) are generally disseminated, veinlet and vein hosted with a total sulphide content of 2.5% averaging 0.5%Cu and 0.25g/t Au. The copper gold grades and bornite to chalcopyrite ratio increases with the intensity of K-silicate alteration and magnetite content.

Reko Diq Porphyry Cu-Au Deposits, Balochistan-Pakistan **Abdul Razique and Richard Tosdal**

The Chagai-Zagros magmatic arc is an under-explored metallogenic belt that

WESTERN PORPHYRY (H14 - H15)





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