

## **Controls on Polymetallic Vein Deposits and Porphyry Deposits in the Phum Syarung-Dok Yong Fault Corridor, Ratanakiri Province, Cambodia**

Craig Tammam Richardson,<sup>1,\*</sup> Craig J.R. Hart,<sup>1</sup> Adrian G. Mann,<sup>2</sup> and Kurtis Dunstone<sup>2</sup>

<sup>1</sup>University of British Columbia, Mineral Deposit Research Unit, Vancouver, Canada

<sup>2</sup>Angkor Gold Corp, Phnom Penh, Cambodia

\*Corresponding author: e-mail, craigtammam@hotmail.com

Mineral exploration in deeply weathered terranes requires robust and cost-effective programs to generate new exploration targets. A fundamental component in these programs is creating an exploration model to categorize known deposits and highlight the controls on mineralization in the region. In northeastern Cambodia, the Phum Syarung-Dok Yong fault corridor is known to host a number of polymetallic vein deposits with potential for further discoveries. However, the lack of detailed geological mapping and short exploration history limits the understanding of these deposits, impeding further exploration. New geological mapping, termite mound geochemistry, SWIR alteration mapping, and rock-chip geochemistry were used to update existing geological knowledge in the area and create an exploration model used to vector toward new mineralization in the corridor. This new exploration model has led to the discovery of additional polymetallic veins and the discovery of Halo, a new Mo-Cu porphyry deposit.