

AuRORA Cu-Au-Ag Discovery in the Toodoggone District, British Columbia: Implication for Stikine Terrane Prospectivity

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The AuRORA Cu-Au-Ag discovery was made adjacent to the known Pine and Kemess deposits, in the Toodoggone region of northwestern British Columbia. This represents both: 1) a step change for the Toodoggone, where higher grade K-rich, silica-saturated alkalic porphyry clusters are juxtaposed to more typical calc-alkaline Cu-Au systems and 2) the importance of telescoping in forming shallow, high-grade porphyry deposits.

The AuRORA discovery highlights the underexplored mineral potential of the Toodoggone region and the broader prospectivity of the Stikinia arc to host very high grade, gold rich porphyry copper systems across a wider volcanic age range than previously recognized. This comes 57 years after Cu-bearing outcrops were first recognized at Pine, and more than 8 years since Amarc initiated systematic exploration of the Joy property.

Mineralization at AuRORA is centered on intense quartz stockwork, K-feldspar-magnetite alteration, and associated multi-phase monzonitic porphyries. The highest grades at AuRORA are capped by pyrite-bearing sericite-clay alteration. The gossanous hills above these alteration zones have km-scale, low order and erratic surface geochemical signatures further obscured by thin valley till cover. Targeting the core of a coincident IP chargeability and magnetic anomaly successfully intersected the AuRORA porphyry mineralization. Gold grades 2 g/t Au to >5 g/t Au can occur with >1% Cu in chalcopyrite stockwork and disseminations, consistent with relationship documented elsewhere in British Columbia (e.g., Red Chris).

The story of discovery at AuRORA highlights the importance of systematic exploration across the full extent of known porphyry mineral system, including the critical role of district-scale geophysics for detecting mineralization beneath thin but explorable cover.