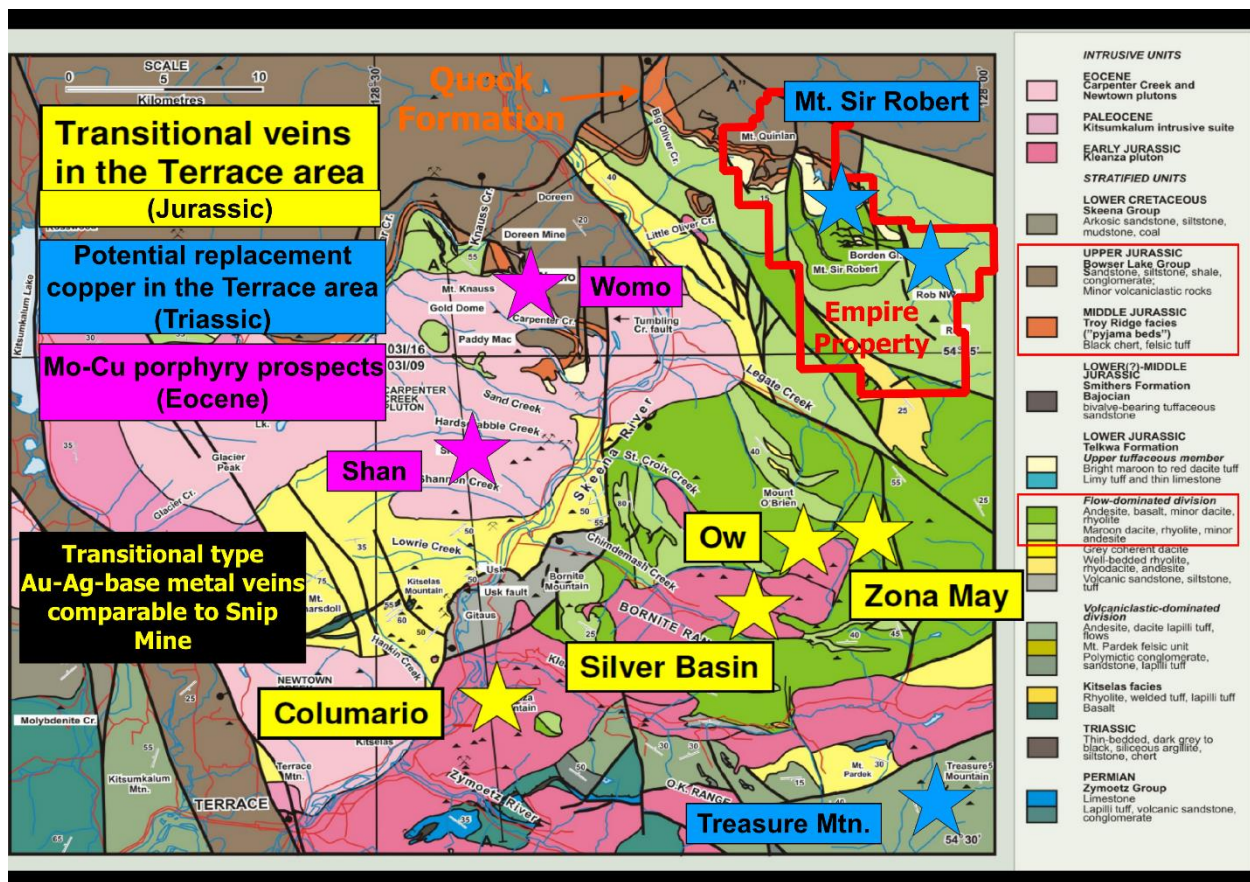


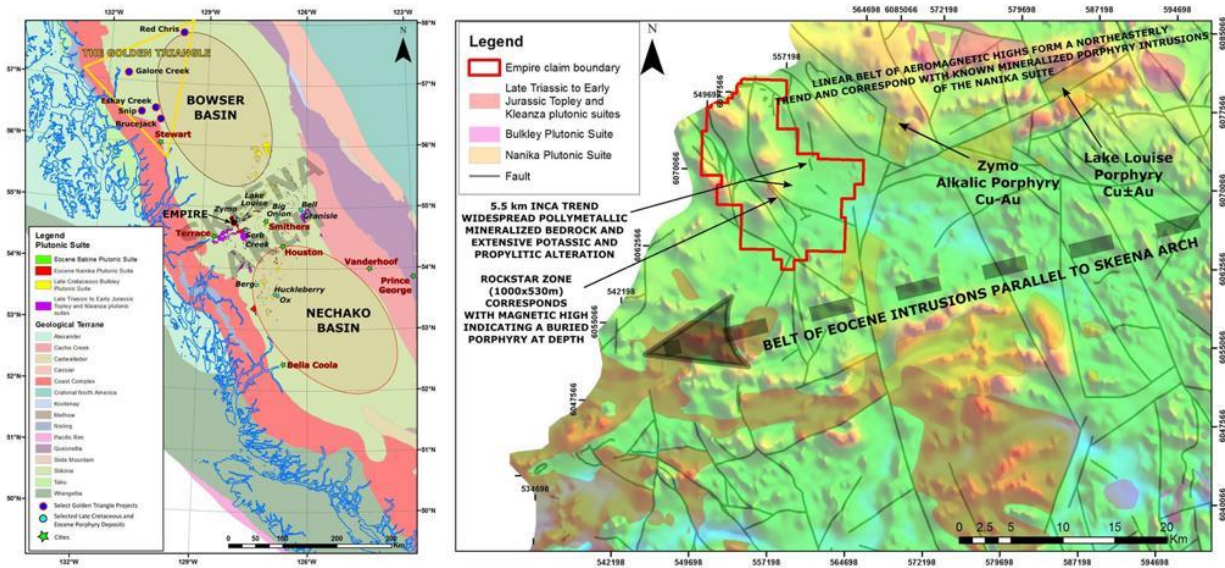
EMPIRE PROPERTY

Porphyry Potential

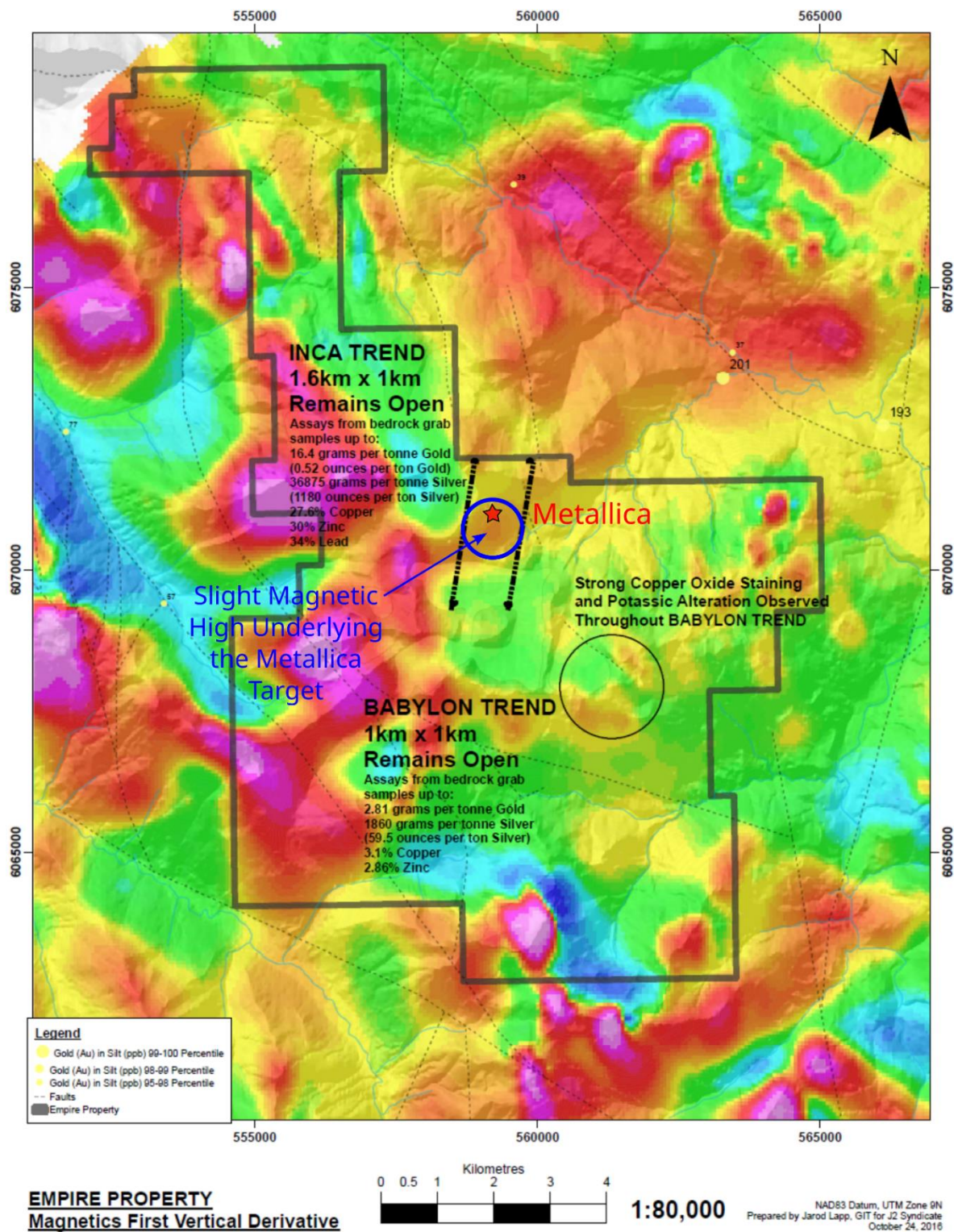
Geology

The map below is from a presentation that J. Nelson gave in 2007-2008 around the potential for mineralizing systems in the Terrace area. The Empre property hosts 2 key location that were determined to be potential replacement copper. Worth noting is the presence of the Quock formation in the northern part of the property. Also, several occurrences of Snip type Au-Ag-BaseMetal veins have been observed in the area immediately south of the property. The main units found on the Empire properties are: Volcanic flows (andesite, basalt, maroon dacite, minor rhyolite), Bowser Group sediments (conglomerates, sandstones) and "Pyjama Beds" (chert, tuff).



[illegible]

Underlying the Metallica target is a magnetic high, further indication of the potential presence of a porphyry intrusion at depth that could be responsible for the mineralization seen at Metallica and surrounding areas (including Metalworks, MaxMin and Olympus). This could be part of the belt of Cretaceous intrusive units observed along trend to the east.



Structures

Several Northwest and North trending structures have been identified on the property. These structures are among the most consistent in the regional scheme as well (see maps below, *from Angen et al, 2022: Evolution of an Arc-Transverse Structural Corridor, West-Central British Columbia*). There is definitely potential for these structures to be conduits for the fluids from a deep-seated porphyry system.

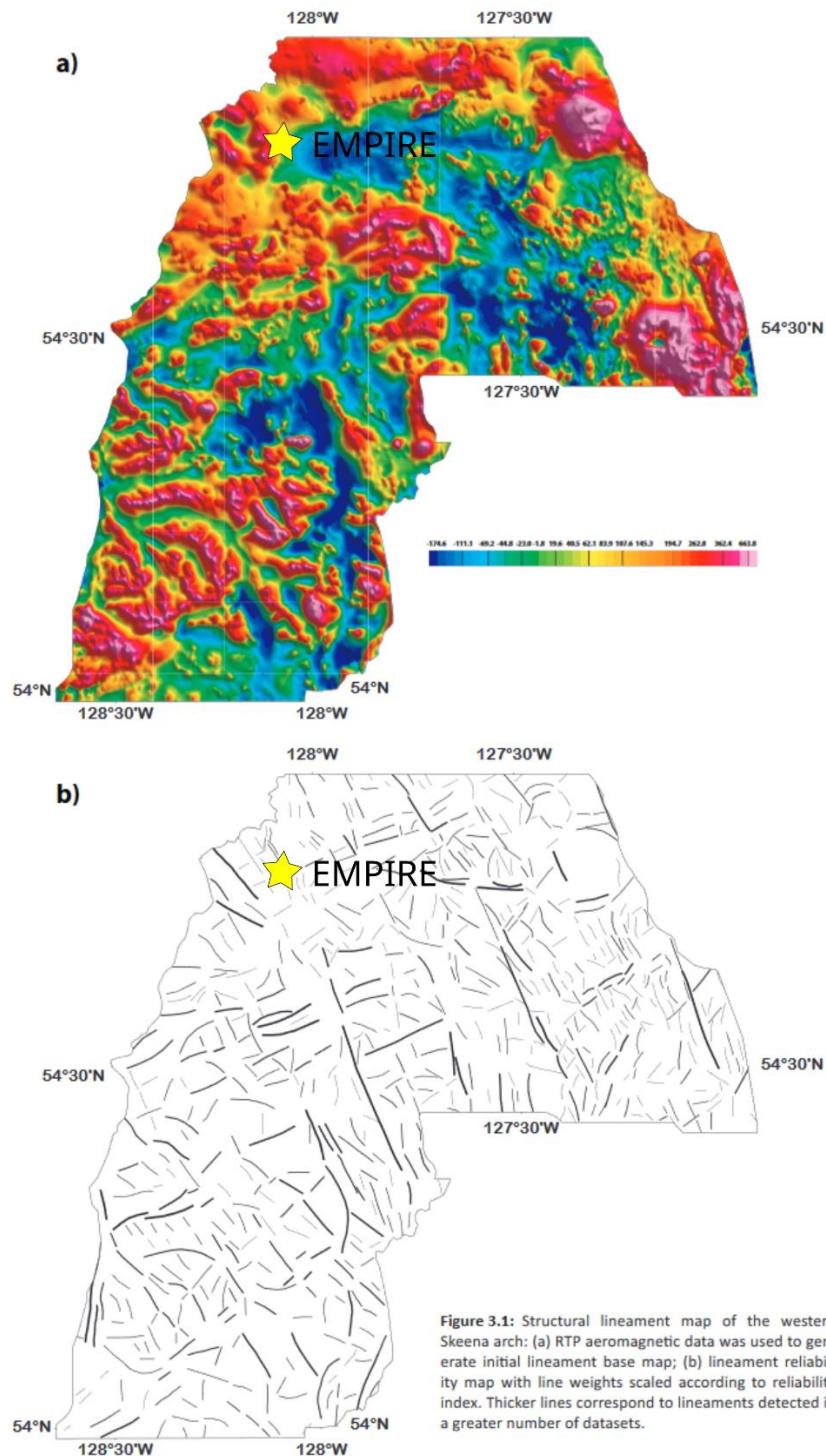


Figure 3.1: Structural lineament map of the western Skeena arch: (a) RTP aeromagnetic data was used to generate initial lineament base map; (b) lineament reliability map with line weights scaled according to reliability index. Thicker lines correspond to lineaments detected in a greater number of datasets.

Outcrops

The following photos show quartz-calcite veining and hydrothermal breccia occurring on the Inca trend (Metallica, MaxMin, Metalworks and Olympus). Additional evidence that movement of fluids has occurred over time in these zones along shears and faults indicative of close proximity to a porphyry core.





Brecciated contact between volcanic units within carbonatized wall rock. Additional evidence of porphyry system at play.



Potassic alteration of wall rock with mineralized fractures and veining. Additional evidence of porphyry system at play

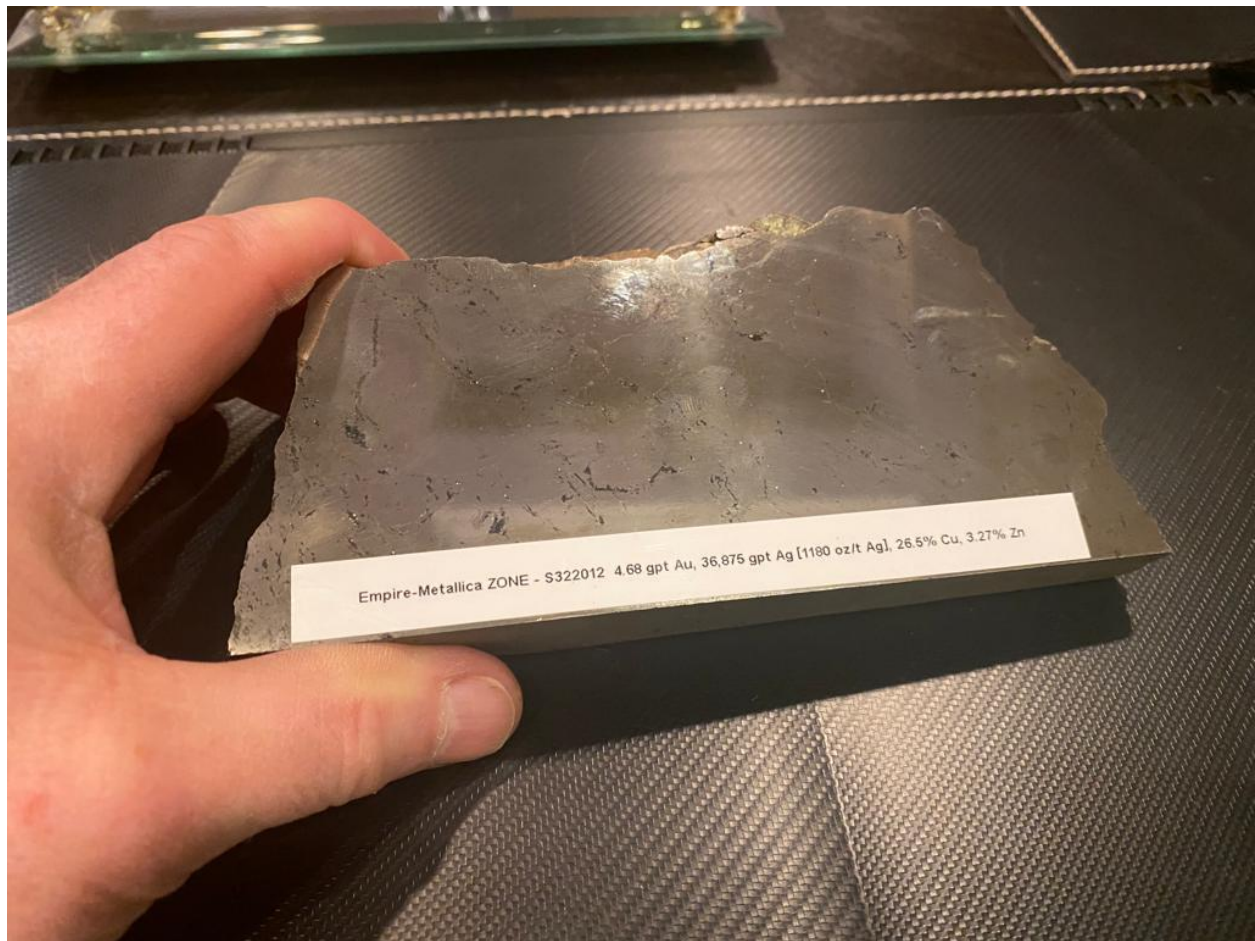


Samples

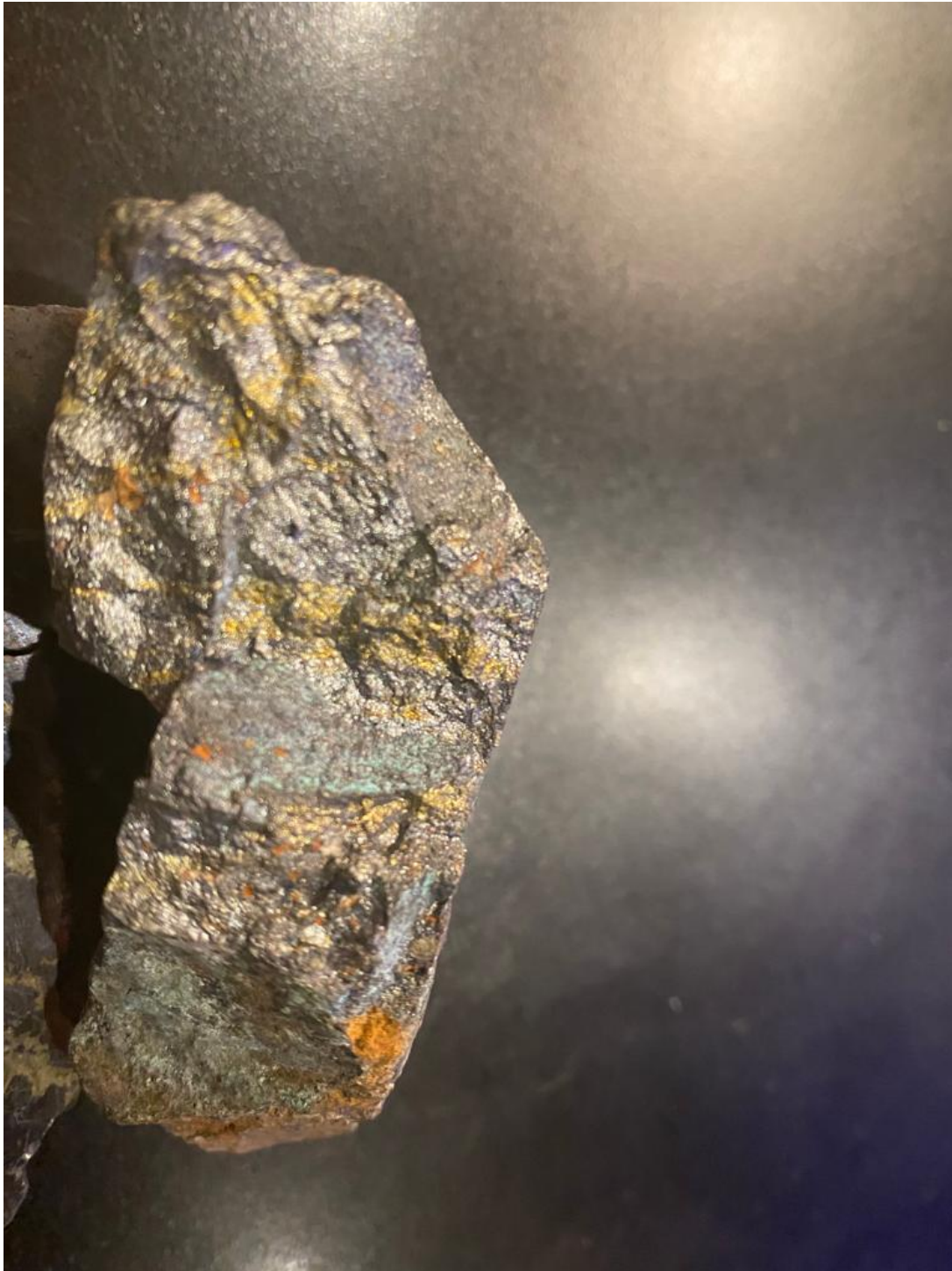
A channel sample (W503059) from the Metallica vein assayed 662 oz/t Ag, 26.4 % Cu and 2.8 % Zn over 0.2 meters. Sample contains significant amounts of chalcopyrite and sphalerite. *With clasts of quartz rich material (potentially useful for fluid inclusion work to determine origin of mineralization).*



Below is a picture from a grab sample (S322012) from the Metallica vein that returned 4.8 gpt Au, 36,875 gpt Ag (1180 oz/t), 26.5 % Cu and 3.27 % Zn.



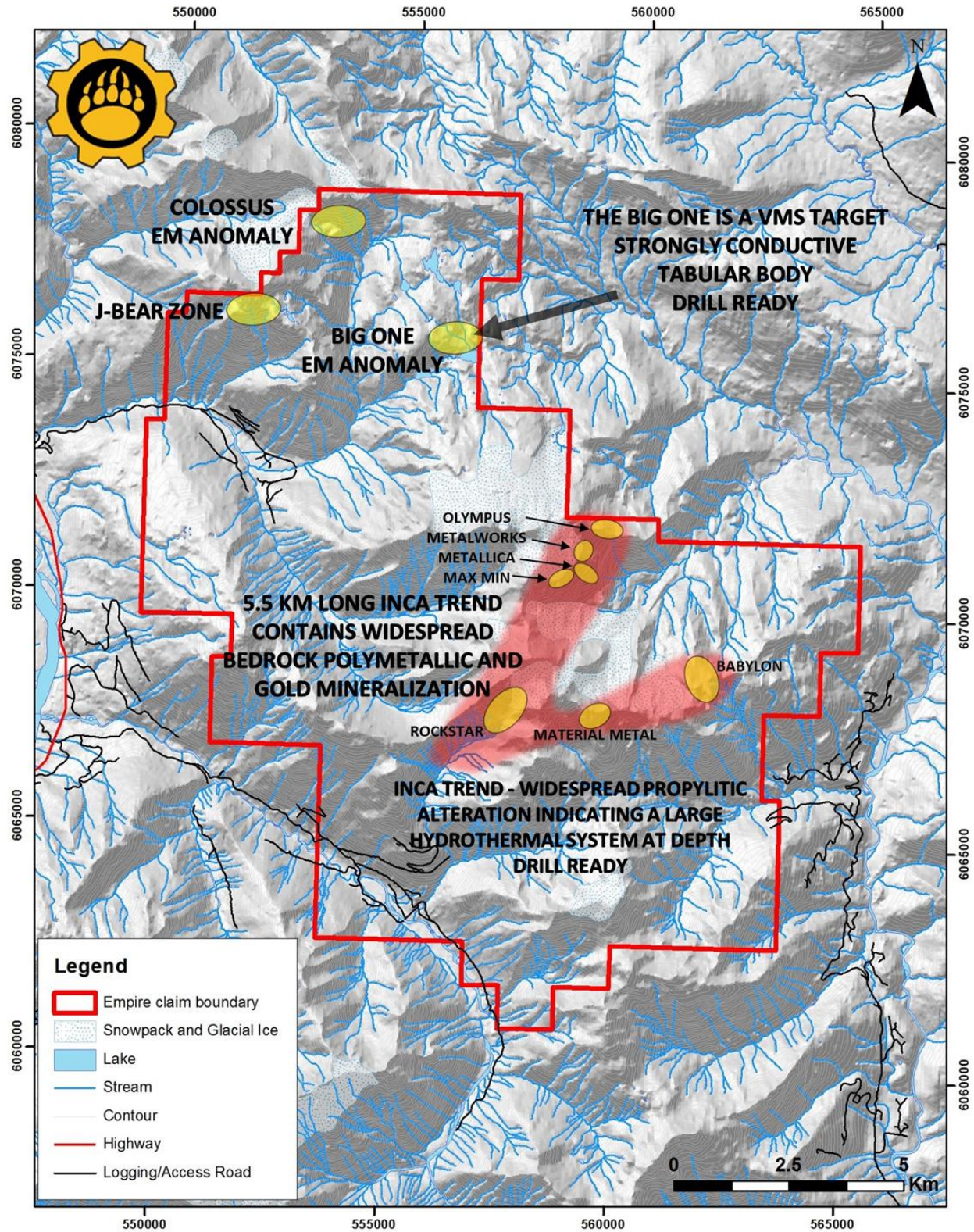
An additional sample (S322018) collected from the same massive sulphide vein assayed 1.7 gpt Au, 20,937 gpt Ag, 27.6 % Cu, 2.88 % Zn.



The 5 shallow dipping layered veins mapped above the massive sulphide vein, are characterized by similar mineralogy, but we noticeably more quartz. They contain between 1 and 16.4 gpt Au and vary in thickness along strike from 0.1 to 0.5 meters.



Location





Link to Empire – Metallica video

<https://m.youtube.com/watch?v=OximcKmmBlo>

2023 Empire – Metallica Drill Plan

