Palokas Prospect: An Exciting new Gold Discovery in the Peräpohja Schist Belt, Finland

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The Palokas Prospect is an exciting new gold discovery hosted within the Peräpohja Schist Belt, approximately 35 kilometres west of Rovaniemi in southern Lapland. Recent published drilling results available on the Mawson Resources website include 19.6 metres at 7.5 g/t gold from 18.1 metres in drill hole PRAJ0107.

The gold mineralisation is hosted by a tabular package of massive to foliated pyrrhotite-bearing highly magnesian green chlorite-amphibole-tourmaline rocks cut by quartz veins, enclosed within magnesian grey pyrrhotite-bearing schistose amphibole-rich calcsilicate rocks. Extending vertically below and laterally away from the gold mineralised rocks, pyrite becomes the dominant sulphide, and the overall oxidation state of the rocks increases until pinkish albitic calcsilicate rocks predominate. The hangingwall sequence contains more reduced metasediments comprising biotite-bearing calcschists, grey calcsilicate rocks, and biotite-muscovite schists. Where the hydrothermal effects of the gold mineralisation are absent, metamorphic grade is amphibolite facies.

The gold is typically fine grained (less than 20 microns) and held at silicate-sulphide grain boundaries, but where grade increases, the grainsize also increases with up to 30~% falling between 200 and 500 microns. In stark contrast to the Rompas Prospect some $10~\mathrm{km}$ to the west, only two grains of visible gold have been observed in drill core. Uranium values are also low, generally less than $30~\mathrm{ppm}$. Sulphide appears to contain very little, if no gold. Accompanying the gold-pyrrhotite zone is ilmenite and scheelite.

Apparently undeformed quartz veins appear to control the chlorite distribution and are spatially related to elevated gold grades. A magnesian gold skarn is proposed as the most likely "genetic model" for this system.

At the time of writing, drilling has been restricted to a small 100 metre by 80 metre area with 25 mm diamond drill core. In winter 2015-2016 over 4000 metres of larger diameter drilling is planned to test the vertical and lateral extents of the Palokas system.

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