Four intrusive units have been found in the vicinity of the Sisson Brook W-Mo-Cu deposit: (1) medium-grained, equigranular muscovite-biotite granite with brown biotite that is slightly altered to chlorite along the rim and foliation; (2) biotite granite with ca. 20% greenish-brown to reddish-brown biotite and accessory zircon, apatite, monazite, magnetite, titanite, sulphide, and ilmenite; (3) biotite-bearing granite dykes with similar mineralogical features as the biotite granite, except these dykes are more highly evolved (higher Zr/TiO$_2$) and have apatite as the main accessory mineral as inclusions in biotite; and (4) porphyry dykes with phenocrysts consisting of approximately 23% plagioclase up to 1 cm, 10% quartz up to 7 mm, 8% biotite up to 0.3 mm in length, and 7% K-feldspar. The distinctive colour of the biotite in the biotite granite sub-class may signify that the magma crystallized under variable redox conditions.

The electron probe micro-analyzer (EPMA) data of