

# Mineral chemistry in mineralised layers and barren rocks of East Pana intrusion, Kola Peninsula, Russia

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East Pana intrusion is a part of the Fedorovo-Pana mafic-ultramafic layered plutonic complex cropping out within the major Paleoproterozoic (2.4-2.7 BA) greenstone belt in the central part of the Kola Peninsula, Russia. Information about mineral chemistry for the East Pana intrusion is sparse. We have carried out electron microprobe and laser ablation ICP-MS analyses of rock-forming minerals (augite, pigeonite, plagioclase) and sulphides in the upper mineralised section of the East Pana stratigraphy (the so-called mineralised Zone B). The mineralised section comprises several 30-50 cm thick PGE-enriched layers (reefs) in a 3 km thick sequence of modally and texturally layered gabbro-norites. Samples for this study were collected from drill cores intersecting the mineralised layers. Our results show that major and trace element compositions of minerals within mineralised layers and in barren rocks vary broadly (see the Figures), probably implying changes in magma composition.

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