

Root to Diatreme Transition in the Renard Kimberlitic Bodies, Quebec  
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The Renard kimberlitic bodies, discovered by the Ashton/SOQUEM joint venture in 2001, are located in the Otish Mountain region of Quebec approximately 275 km northeast of Chibougamau. The kimberlitic bodies were emplaced into the metamorphic rocks of the Superior Province approximately 630 Ma ago, and have mineralogical and chemical characteristics transitional between kimberlite and melnoite (Birkett et al., Lithos, 2004). This study focuses on the textural features of the Renard bodies as they relate to emplacement and preservation. Rock types present in the Renard bodies include: (1) hypabyssal kimberlitic material: dark grey to green-grey rocks with uniform and segregationary textures, (2) kimberlitic breccias with 15-75% country rock xenoliths, and (3) Country Rock Breccia: breccias with greater than 75% xenoliths and almost no kimberlitic component. Kimberlitic breccias can be further divided into two categories: (2a) light brown to grey breccias with, uniform or slightly mottled textures and some magmaclastic textures, and (2b) pale green-grey breccias with more obvious magmaclasts and more abundant crustal xenoliths. These two categories of rock are texturally transitional between hypabyssal and tuffisitic kimberlite. The sequence of textures in these rocks suggests that the transition from root to diatreme zone is preserved in these igneous bodies.