

Sample: FSC47111; Location: Sidewall Core 61, 3673 m

Rock Name:

Compact lithic sandstone

Thin Section:

This sample has been extensively damaged during collection of the sidewall core but it appears to be similar in many respects to other sidewall core sandstones in this well. The average grain size is of the order of 0.2 to 0.3 mm and there is evidence of pressure solution having acted upon the quartz grains leading to the formation of long and concavo-convex grain boundaries.

The overall proportion of clay in the rock is rather difficult to determine but it is probably not more than 15 to 20%. Authigenic kaolinite can only be identified positively in a few places and it seems likely that the bulk of the fine-grained material in the rock is heterogeneous clays, mica and quartz in sedimentary and metasedimentary fragments. These have clearly been compressed between the quartz grains and this process, also, has occluded much of the original porosity and permeability.