

Carbonate is present as finely granular material which has grown within patches of matrix - this is probably simply slightly redistributed material derived from the clastic grains.

Pools of kaolinite/dickite represent the only important authigenic minerals.

Voids are up to 0.5 mm across and commonly are interconnected. Thin linings of limonite generally rim the pores.

Sample: ⁵9924' : TS C7870

Rock Name:

Argillaceous sandstone

Thin Section:

An optical estimate of the constituents gives the following:

	<u>%</u>
Quartz	80
Feldspar	1- 2
Glauconite	Trace
Carbonate	3- 4
Mica	2
Matrix	7
Zircon	Trace
Kaolinite/dickite	1
Tourmaline	Rare
Voids	3- 5

Matrix material in this fine-grained sandstone is fairly abundant and consists of a considerable variety of silt or clay grade clays and quartz; undoubtedly, deformed lithic fragments have contributed to this material but there is a considerable proportion of grey, turbid material which is probably partly recrystallised matrix (*sensu stricto*).

Single-crystal quartz grains constitute the bulk of the detrital fraction and the average grain size is about 0.1 mm. The angularity and low sphericity of the grains indicates that diagenesis has modified the grains somewhat. In fact a few