

Features present in both coarser and finer-grained rocks described above, are present in this sample.

Quartz grains only rarely show traces of their original shapes; normally grain shapes are controlled by mutual compaction between grains, by solution of quartz or by recrystallization. The result is that quartz crystals have equant shapes but are angular and have somewhat irregular grain boundaries. Sutured contacts are common. Undulatory extinction and fractured grains testify to the extreme physical deformation of the rock.

Deformed intergranular material consists of argillaceous lithic material and fine-grained quartz together with some rather coarser mica. Carbonate and kaolinite/dickite are post-deformation and compaction phases.

A distinctive cluster of elongate tourmaline crystals is 0.5 mm long.

The voids in the rock are small and probably not interconnected - some are bounded by rational crystal faces of quartz, others are partly filled by clay.

In brief, the rock contains most of the features described in immediately preceding samples but has a medium-sand grade grain size. It is a submature sand extensively modified during compaction and burial. Authigenetic crystallisation has not been extensive although a considerable proportion of silica has been dissolved away.

Sample: 9442' : TS C7866

Rock Name:

Argillaceous sandstone

Thin Section:

An optical estimate of the constituents gives the following:

	<u>%</u>
Quartz	75
Argillaceous lithic material	10
Mica	1- 2
Chlorite	Rare
Feldspar	2

Cont'd