

EXAMINATION OF ONE SANDSTONE FROM POONBOON
NO. 1

1. PETROGRAPHY

Sample: 10691' : TS C8324

Location:

Poonboon No. 1, Core 5

Rock Name:

Argillaceous sandstone

Hand Specimen:

A pale, buff-coloured rock with a massive habit. The rock is a fine-grained sandstone and is moderately to poorly friable.

Thin Section:

An optical estimate of the constituents gives the following:

	<u>%</u>
Quartz	70
Feldspar	2- 3
Lithic fragments	5- 7
Voids	5-10 (approximately)
Clay matrix	15
Chert	Trace
Carbonate	Trace
Mica	Trace -1
Opagues	Trace
Zircon	Rare

The rock is a fine to medium-grained sandstone with an argillaceous component as well as a moderate proportion of lithic material. Evidence of solution and compaction is widespread.

Quartz and quartzite grains are the predominant component of the detrital fraction; the grain size ranges from approximately 0.08 to 0.4 mm with a mean of 0.2-0.25 mm. Most grains are about sub-angular and many have only moderate sphericity. Both these features may be due, in part, to resorption and/or deformation but are also likely to be largely inherited from rather immature detritus material. Quartz grains show both plain and undulose extinction and 'common' (plutonic) quartz is abundant. A few chert grains and composites (of metamorphic or ?vein quartz) are present as well.