

Bass Strait Bore Core.

Pieces of the above core have been examined and are described hereunder:-

## Core 4, footage 2,631.

In handspecimen the rocks consist of a framework of well packed irregular rounded fragments, from a centimetre to less than a millimetre across, of dark greenish to black aphanitic material. The rock is somewhat porous but the interstices between the fragments, for the most part, are filled with a fine grained white friable material.

In thin section the rock consists largely of fragments of green glass with smooth irregular edges, and smaller shard-like shapes. The glass contains much opaque material including small crystals of ilmenomagnetite, but much is opaque white, and may consist of finely divided zeolite. The fragments are riddled with vesicles some of which have been elongated into narrow tubes by flow. The vesicles are filled with analcite, natrolite and calcite. Pseudomorphs up to 1mm long of natrolite after chabazite and stilbite are common, the original zeolite having been replaced by fibrous natrolite radiating from many centres. There are also fragments similar in structure to the glassy fragments, but consisting almost entirely of zeolite, with only a little glass present. Analcite fills the interstices between the fragments. There is no evidence of reworking or admixture with material of another mode of origin.

The rock is a lapilli tuff.

## Core 12, footage 6,412.

The specimen contains angular grains of quartz up to 4 mm across set in a much finer grained siliceous matrix coloured a streaky brown by heavy minerals. Some opaque white grains are also present and minute flakes of white mica.

In thin section the rock consists of closely packed clastic angular grains of quartz, feldspar (oligoclase), quartzite, schistose quartzite, and possibly granitic rock, averaging 2 mm across in a matrix of similar fragments averaging .1mm across. The matrix has a ferruginous cement and contains the heavy minerals tourmaline, zircon topaz, ilmenite and rutile and also muscovitic biotite. The sediment indicates rapid accumulation in a shallow water environment.

## Core 13, footage 6,957

The specimen is a fine grained white, granular, quartzose rock with many irregular bands and thin wisps of finer grained dark brown material.

In thin section the white part of the specimen consists of well compacted angular grains of quartz, averaging .1mm across, with subsidiary feldspar, mica, tourmaline and