

Mineralogy -

Clear quartz is the dominant primary constituent and there is less than 10% weathered K-feldspar. Carbonaceous material is common and forms laminations along bedding planes, and there is some elongate muscovite associated with it. Secondary carbonate occurs in minor amounts and there is a rare trace of hornblende. Matrix material is clay and finely divided sericite.

Discussion -

The specimens examined are all broadly similar in texture and mineralogy. Detrital quartz is the dominant constituent, although feldspar becomes important in specimens 65 - 16 and 65 - 19, which should be called feldspathic sandstones. It is probable that all the rocks originally contained more feldspar, as much of the clay and sericite matrix, could have been authigenically derived from this source. The amount of rounding of the quartz grains suggests they are more mature than the feldspar, and the rocks probably have a composite source. The fine grain size, significant amount of cement and carbonaceous material indicate a deltaic or estuarine environment of deposition.