

Table 8.9 General features of deeper-water carbonates and other pelagic facies

Deposition: takes place in deeper-water epeiric seas, outer shelves and platforms, submarine slopes, in basins of many types and on ridges and banks within basinal areas. Deposition is from suspension and by resedimentation processes.

Lithologies: pelagic limestones are usually fine grained with dominantly pelagic fauna; limestone turbidites are coarser grained and consist largely of shallow water fossils; cherts, phosphorites, iron-manganese nodules and enrichments, hemipelagic mudrocks.

Structures: pelagic limestones: often nodular, hardgrounds common together with sheet cracks and neptunian dykes, stylolites common; turbidite limestones: graded bedding and other structures (sole and internal) as in Fig. 8.6 although often less well developed; bedded cherts: may be graded and laminated. Pelagic sediments may be slump folded and brecciated.

Fossils: pelagic fossils dominate; derived shallow-water fossils in limestone turbidites.

Facies sequences: no typical sequences; pelagic facies may overlie or underlie turbidite successions or follow platform carbonates. Pelagic facies may be associated with volcaniclastic sediments and pillow lavas.