

grains show overgrowths indicative that quartz has been dissolved and redeposited in the rock. The presence of matrix mud, lithic fragments, feldspar and mica all suggest that the rock is somewhat immature. Mica flakes have been characteristically splayed open and/or bent during compaction. Some metamorphic quartzite fragments were noted.

The detritus also contains carbonate grains, most of which appear to have been subsequently recrystallised. New carbonate (a brown dolomite or, possibly, siderite) forms both small sand-grade grains and deep-brown clots of granular material. The latter are commonly elongated parallel to the bedding and have clearly been deformed during compaction. They are concentrated in some thin horizons.

Glaucanite is a minor component of some other rocks in this collection but is particularly distinctive in this rock because of its bright green colour. It occurs as a colloform, cavity-filling phase both within matrix patches of brown clay and as discrete intergranular patches.

As described above, the matrix (and pseudomatrix) is fine-grained clay and quartz. Some is clearly recrystallised chalcidonic material, some retains its admixed clay-quartz-carbonate mineralogy. Pools of kaolinite/dickite are authigenic, representing either leached and recrystallised matrix or precipitations from circulating water.

Voids are not abundant and probably not interconnected.

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