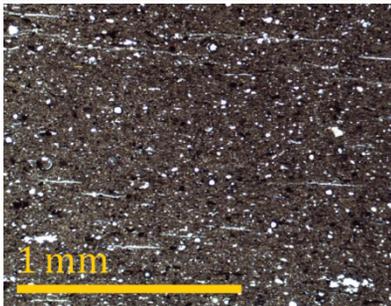
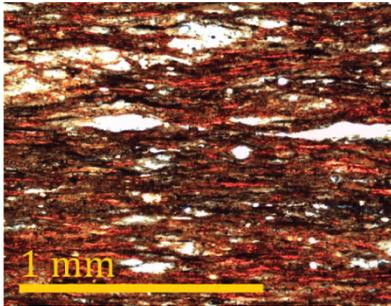
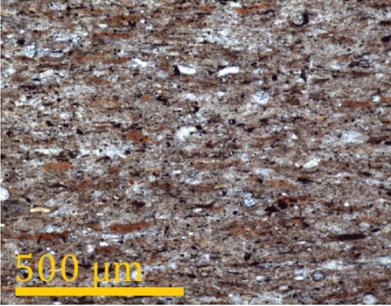
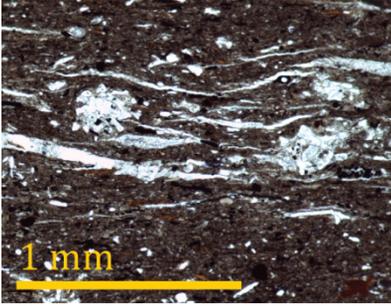
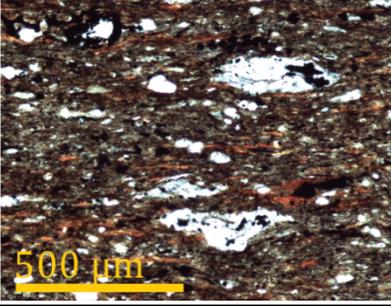


Name	Description	Interpretation	Optical light image
<p>1. Clastic detritus-rich medium mudstone</p>	<p>Well-churned, argillaceous matrix. Abundant medium detrital grains and calcareous nanofossils which are commonly filled with authigenic kaolinite. Equant organic material grains sit within the matrix.</p>	<p>Deposited in a distal setting with a constant detrital input. Bioturbation indicates well-oxygenated conditions with a moderate sedimentation rate allowing for extensive faunal colonization. Organic material is commonly type III.</p>	
<p>2. Organic material and calcareous pellet-rich, laminated mudstone</p>	<p>Discontinuous wavy laminae are organized into normally graded beds with erosional bases. Comprised of organo-mineralic aggregates, detrital material, and calcareous faecal pellets.</p>	<p>Organic material was deposited as algal mats that were occasionally disturbed and locally reworked. Supply of detrital material was continuous. This facies represents the highest levels of primary productivity.</p>	
<p>3. Coccolith-dominated medium mudstone</p>	<p>Fine to medium normally graded calcareous mudstone beds. Dominated by coccolith plates and coccolith-rich faecal pellets in a coccolith, clay mineral, and quartz-rich matrix.</p>	<p>This facies represents times of peak carbonate productivity. Continuous supply of detrital material that was diluted by coccolith material. Material was locally reworked into graded beds.</p>	
<p>4. Biogenic-detritus-dominated, fine to medium mudstone</p>	<p>Disarticulated shell fragments dominate this facies. Shells and abundant fine to coarse mud-sized quartz grains sit within an argillaceous matrix. Diagenetic calcite stringers overprint.</p>	<p>Deposited when depositional energy was relatively high. Shells and framework grains brought in by unusual storm activity. Calcitic stringers were formed during early diagenesis.</p>	
<p>5. Agglutinated foraminifera-bearing, medium to coarse, carbonaceous mudstone</p>	<p>Well-churned, argillaceous and algal material matrix. Detrital grains, abundant agglutinated foraminifera, and lithic clasts sit within the matrix.</p>	<p>This facies represent a finely balanced system between a well-mixed water productive column indicated by the foraminifera and faunal colonization, and the production and preservation of the algal material.</p>	
<p>6. Carbonate-cemented, coarse-grained mudstone</p>	<p>Medium to coarse, angular, diagenetic carbonate grain-dominated sediment with an argillaceous matrix.</p>	<p>Dolomite rhombs formed during early diagenesis resulting from microbial sulfate reduction. These samples are discounted from palaeoenvironmental interpretation.</p>	