

Figure DR1. Stratigraphic terminology of the Tooloo and Miningarra groups showing informal and formal members of the Chiall Formation. Originally both the Miningarra and Tooloo were considered subgroups (Pirajno et al., 2009), but they have recently been elevated to group status (Roger Hocking, written communication, 2013).

Figure DR2. Depositional model for Chiall Formation fluvial iron formation. Iron-rich fluvial discharge mixed with seawater causing Fe precipitation in distributary channels and adjacent peritidal environments. Multistory channel deposits are best preserved against east-west trending paleo-hills of folded Frere Formation where paleocurrents indicate rivers drained SE into the Earraheedy Basin.

Miningarra Group	Mulgarra SS	
	Kulele LS	
	Wongawol Formation	
	Chiall Formation	<div> <div>Sydneys Head Pass Conglom.</div> <div>Princess Range Member</div> <div>Wandiwarra Member</div> <div>Karri Karri Member</div> </div>
Tooloo Group	Frere Formation	
	Yelma Formation	

Figure DR1

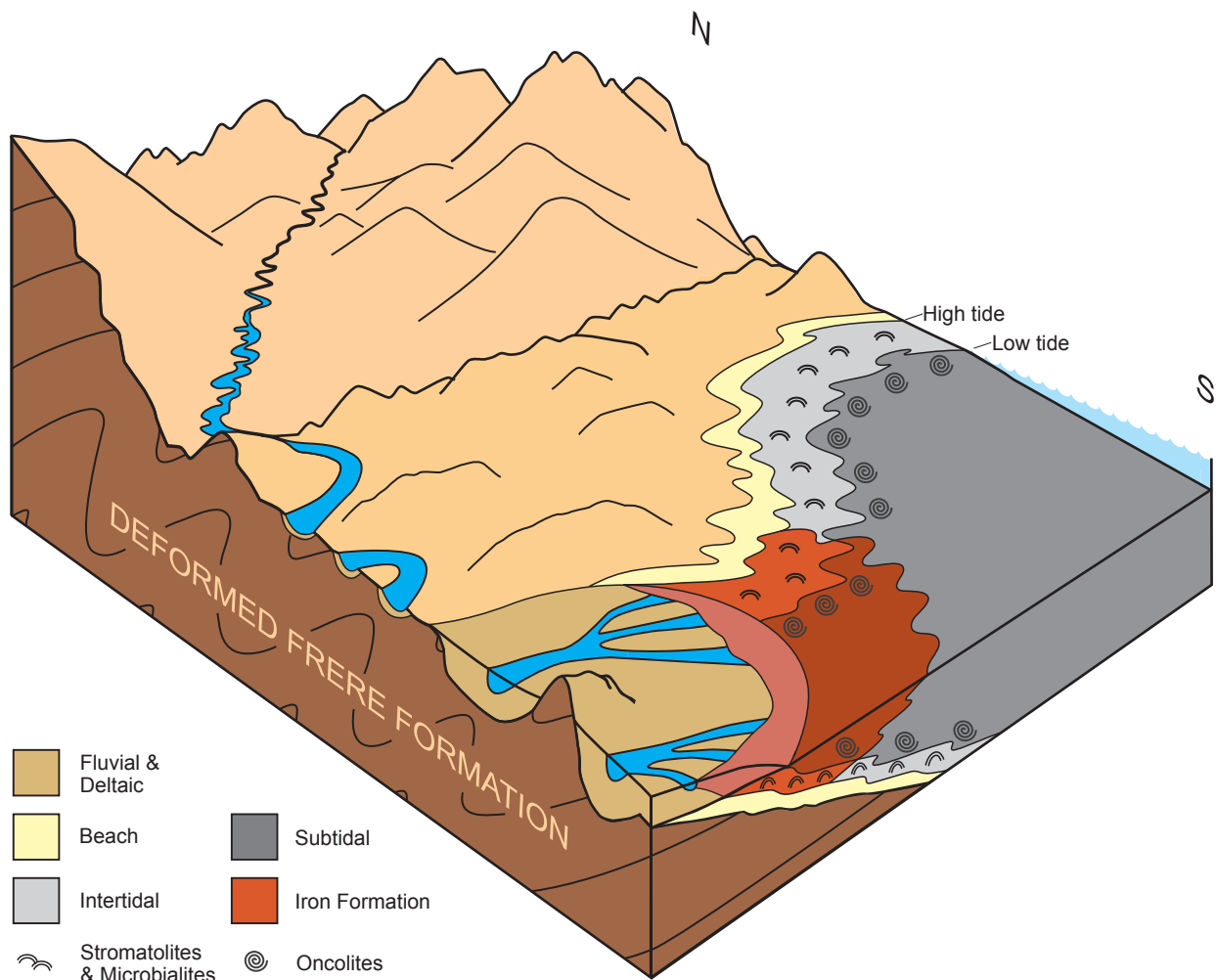


Figure DR2