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Title of article North Carolina shelf-edge sandstone; age, environment of
origin, and relationship to pre-existing sea levels

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Sandstones

TABLE 1. PETROGRAPHIC DESCRIPTION OF SHELF-BREAK SANDSTONES

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Sample number	Location (Down & up position of dredge hauls)	Depth in meters	Rock type	Dominant carbonate components	Dominant non-carbonate components	Cement	Matrix
2737	34°01.4'N 76°18.0'W 34°01.4'N 76°17.8'W	88-89	Light brown quartz-rich calcarenite	Medium to gravel-size skeletal grains (foral-line algae, molluscs, barnacles, echinoderms, planktonic Foraminifera) and oolithe	24% medium to very coarse quartz. Moderate to high sphericity (0.7 to 0.9) and subrounded (0.5)	Thin (10-20 μ) dentate rim cement	Submicrocrystalline and fossiliferous submicrocrystalline calcilutite patches. Commonly showing pelletoid or relict pelletoid texture
7845	34°06.5'N 76°15.5'W 34°06.5'N 76°15.5'W	73-74	Light brown quartz-rich calcarenite	Fine to gravel-size skeletal grains (molluscs, coralline algae, benthonic Foraminifera, echinoderms, serpulids, and bryozoan) oolithe and oolite lithoclasts	13% fine to very coarse quartz. Moderate sphericity (0.7) and subangular (0.3)	Grains have a thin (<10 μ) dentate rim cement	Small patches of submicrocrystalline calcilutite which has pelletoid (20 μ) or relict pelletoid texture
7848	34°09.1'N 76°11.0'W 34°09.1'N 76°11.0'W	68-95	Light brown quartz-rich calcarenite	Very fine to gravel-size skeletal grains (coralline algae, molluscs, echinoderms, barnacles, benthonic Foraminifera, and serpulids) and a few oolithe	15% very fine to very coarse quartz. Moderate sphericity (0.7) and rounded (0.7)	Most grains have a thick dense acicular rim cement (up to 100 μ thick)	
8085	34°03.6'N 76°15.8'W 34°03.5'N 76°15.9'W	92-102	Light gray brown quartz-rich calcarenite	Medium to gravel-size skeletal grains (molluscs, coralline algae, bryozoans, barnacles, benthonic Foraminifera and planktonic Foraminifera) and oolithe and oolite lithoclasts	33% medium to coarse quartz. Moderate sphericity (0.7) and subrounded (0.5)	Most grains have well developed dentate rim cement (up to 30 μ thick)	Small patches of pelletoid (up to 50 μ) submicrocrystalline calcilutite.
8200	33°58.4'N 76°22.4'W 33°58.4'N 76°22.4'W	99-108	Light brown quartz-rich calcarenite	Medium to gravel-size skeletal grains (molluscs, coralline algae, barnacles, bryozoan, benthonic and planktonic Foraminifera, echinoderms, and serpulids) and oolithe	16% very fine to very coarse quartz. Moderate sphericity (0.7) and subangular (0.3)	Thin (10 μ) dentate rim cement	Scattered patches of pelletoid (up to 50 μ) submicrocrystalline calcilutite
8234	34°15.8'N 76°02.4'W 34°15.8'N 76°02.5'W	82-100	Light brown quartz-rich calcarenite	Coarse to gravel-size skeletal grains (molluscs, barnacles, coralline algae, serpulids, bryozoans, and echinoderms).	32% medium to coarse quartz. High sphericity (0.9) and rounded	Both carbonate and quartz grains have a thick dentate rim cement (up to 50 μ thick)	Dense submicrocrystalline calcilutite matrix infills most of the intergranular voids. Generally has a pelletoid (up to 150 μ) or relict pelletoid texture. Patches of very fine to extremely fine fossiliferous submicrocrystalline calcilutite