

Daily Drilling and Scientific Report for IODP Expedition 325, Great Barrier Reef Environmental Change

4th April 2010 (0000 - 2400 local time)

1. Location

NOG 01B Site 8

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (on station M0058A):

Latitude: 17° 05.84 S Longitude: 146° 35.36 E

2. Activity summary

Coring operations were completed at M0057A. The vessel then transited to NOG_01B Site 8 M0058A, where preparation for API coring operations began.

3. Science report

60% recoveries respectively) sequences of coral framestones (ie. massive *Porites*, Favids etc) interlayered with yellow-orange stained grainstones. Based on the drillers logs the top 1 m of Core 10R above the recovered framestones was likely unlithified sediments. Both the corals and grainstones show evidence of iron staining and solution cavities. Cores 12R advanced to 32.38 mbsf and recovered a similar lithology. Core 13R completed a 1.20 m run down to 33.58 mbsf and recovered coral framestones and grainstones. Cores 14R-16R advanced to 41.78 mbsf and recovered beautiful, continuous sequences of coral framestones and grainstones (71-81.6% recovery).

4. Core recovery details

Hole	M0057A
LAT water depth	39.21m
Cores recovered	9R – 16R
Drilled length	18.6m
Recovered length	9.64m
Recovery	51.83%
Depth at midnight	41.78mbsf (final depth)

5. Weather

Sea state: moderate (4) with a swell of 1.25-2.5m; wind direction E becoming ESE by midday force 5 (17 – 21 knots); overcast; periodic heavy showers; 26° C.

Next 24 hrs: Sea state moderate with swell of 1.7-2.2m in open waters; wind direction SE 15-20 knots increasing to 20-25 knots overnight; scattered showers.