



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

**30<sup>th</sup> March 2010 (0000 - 2400 local time)**

**1. Location**

NOG\_01B Site 7

Time zone: Brisbane Australia Time, UTC +10

Position at midnight (on station M0054):

Latitude: 17° 06.042 S

Longitude: 146° 34.60458 E

**2. Activity summary**

Completed HQ coring operations at M0054A and M0054B and commenced wireline logging operations.

**3. Science report**

Core 1W (wash core) cored only infill from 5.86-8.40 mbsf. Core 2W recovered no material between 8.40-11.60 mbsf. Core 3R advanced to 15 mbsf and recovered a 10 cm cored segment of coralgal-microbialite framestone and carbonate sands and gravels in the core catcher. The drillers logs indicated that the bit encountered something hard at ~14.8 mbsf and we were once again coring the reef rather than infill.

Core 4R recovered framework, with microbialite framestone in Core 5R. Core 6R achieved 93 % recovery and advanced to 17.0 mbsf. Core 7R again contained microbialite dominated framestone, and 97 % recovery was achieved from a 3m run. Core 8R advanced to 21.2 mbsf and recovered a 2.8 m drilled length, consisting of microbialite dominated framestone and some corals. The top of the Core 9R contained massive coral. However, most of the section was lime sand with grainstone and partially unconsolidated Halimeda and sand retrieved from the bottom of the section. Microbialite was limited to the portion of the coral framestone. Core 10R contained lime sand and grainstone. Core 11R consisted of lime sand and gravel, advancing to 30.2 mbsf. Core 12R also contained sand and the decision was made to move to logging operations and terminate coring at this site.

#### 4. Core recovery details

<b>Hole</b>	M0054A
<b>LAT water depth</b>	107.4m
<b>Cores recovered</b>	1W – 12R
<b>Drilled length</b>	27.84m
<b>Recovery length</b>	8.25m
<b>Recovery</b>	29.63%
<b>Depth at midnight</b>	33.2mbsf (final depth)_

#### 5. Weather

Sea state: moderate (4) with a swell of 1.25 – 2.5m; wind direction ESE force 5 (17 – 21 knots) occasionally force 4 and 6 for periods; predominantly partly cloudy; 29°C.

Next 24 hrs: Sea state moderate with swell of 1.2 - 1.7m in open waters; wind direction E/SE 15 – 20 knots; scattered showers.