



Daily Drilling and Scientific Report for IODP Expedition 313 New Jersey Shallow Shelf

31st May 2009 (0000-2400, local time)

1. Location

Hole MAT-2D (Hole M0028A).

Time zone: US Eastern Time, UTC -4

Position at midnight:

Latitude: 39° 33.94279' N

Longitude: 73° 29.83481' W

2. Activity summary

Coring and downhole recovery of damaged BHA parts at MAT-2D (M0028A)

3. Science report

The first half of the day was very successful, with excellent recovery, before the core barrel became stuck at 337mbsf. We started by coring through the micaceous silty clays containing diatoms and sponge spines that were first encountered yesterday (30th May). At 320mbsf we went through dark-olive-grey, poorly sorted, very fine to very coarse-grained, glauconite and quartz clayey sand, containing rare and altered shell fragments and phosphate aggregates. The clayey matrix of the sand shows rough banding of soft, tan/whitish and hard, dark/olive grey horizons. The quartz grains are poorly mature, subrounded to subangular whilst the glauconite grains are well rounded. Downhole, the glauconite content decreases progressively. At the same time the granule grain size and shell debris fractions increase. The granule and pebbly character of the sediment was high when we stopped at (or just above?) the m5.3 late Burdigalian unconformity.

4. Core recovery details

Hole	M0028A
Cores recovered	9
Drilled length	24.4 m
Recovered length	17.08 m
Recovery	70 %
Depth at midnight	338.97 mbsf

5. Weather

Sea swell 2 - 3 ft; S to SW wind direction; wind speed 10 - 15 kt with gusts up to 23 kt; Overcast initially with rain, becoming sunny by midday; 19°C.

Next 24 hrs: Sea swell 2 - 4 ft; NW winds 10 - 15 kt becoming SW to S gusting to 20 kt by the afternoon; 20°C.