



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

2nd July 2009 (0000-2400, local time)

1. Location

Hole MAT-3A (Hole M0029A).

Time zone: US Eastern Time, UTC -4

Position at midnight:

Latitude: 39° 31.1705' N

Longitude: 73° 24.7925' W

2. Activity summary

Coring operations at Hole M0029A (MAT-3A).

3. Science report

This was a day of excellent drilling rates and good recovery (89%). We recovered ~37m of sediment from core 101R to core 113R (431-468 mbsf). Core 103R at 434 mbsf slipped out of the liner during retrieval. However, this was partially retrieved with the next core run. We identified three main sediment packages:

- Dark brownish-grey, bioturbated, micaceous, lignitic and bioclastic clayey silt with some glauconite and opaque heavy minerals (cores 101-106R, 431-446 mbsf)
- Interlaminated, light grey, diatom-rich silty clay containing forams, and dark grey clayey silt to very fine-grained bioclastic, quartz and glauconitic sand (cores 107-109R, 446-456 mbsf);
- Moderately to well-sorted, bioturbated, very fine to fine grained quartz and glauconitic sand with bioclasts (cores 110-113R, 456-468 mbsf).

The three sediment packages seem to suggest a progressive fining, and probably deepening upward trend. The boundary between the seismic units located at an estimated 450 mbsf on the reference line Oc270-529 probably corresponds to the first appearance of massive sand.

4. Core recovery details

Hole	M0029A
Cores recovered	101R-113R (13 runs)
Drilled length	36.6 m
Recovered length	32.63 m
Recovery	89.15 %
Depth at midnight	471.31 mbsf

5. Weather

Sea swell 1-3 ft increasing to 5 by mid afternoon; variable winds 5-10 kt gusting to 25 kt by late afternoon; sun with patchy cloud towards late afternoon; 28°C. Next 24 hours: sea swell 2-3 ft; W winds 5-10 kt; isolated showers and thunderstorms. 23°C.