



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

17th May 2009 (0000-2400, local time)

1. Location

Hole MAT-1A (Hole M0027A).

Time zone: US Eastern Time, UTC -4

Position at midnight:

Latitude: 39° 38.04606' N

Longitude: 73° 37.30146' W

2. Activity summary

Conducting coring operations at Hole MAT-1A (M0027A).

3. Science report

Today was another day of excellent recovery and very good advance pace. We cored the base of the Oligocene today and encountered the Oligocene/Eocene boundary. We documented a nice prograding sequence of sediment from dark-green, glauconite clays to fossiliferous, slightly quartzose, fine-grained glauconite sands. At the Oligocene/Eocene boundary we found brownish, slightly glauconitic clays with a deep water assemblage of forams with Eocene age affinities (preliminary results) and a barren interval. The nice recovery we have got through this core into the Oligocene section and its transition to the Eocene is a good promise for further work on this overall typical "low temperature" period of time, with its correlative massive extinction of life.

4. Core recovery details

Hole	M0027A
Cores recovered	199R to 213R (15 cores)
Drilled length	45.75 m
Recovered length	47.22 m
Recovery	103.21 %
Depth at midnight	600.51 mbsf

5. Weather

Sea swell 3-5 ft; wind direction SW to NW; wind speed 15-20 kt (gusting to 25 kt); showers; 15°C.

Next 24 hrs: sea well 3-5ft (subsiding to 2-3ft); wind direction N (becoming NE, then SE); wind speed 15-20 kt (gusting 25 kt), becoming 10 kt; chance of rain; 16°C.