

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

26th 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

Conducting open-hole drilling and coring at MAT-2D (M0028A)

3. Science report

Today was the first day of coring at MAT-2D. The goal is here to core through the huge set of clinoform bodies of the Miocene New Jersey margin. The first core was on deck at 16:30 from a depth of 221 mbsf. Recovery was excellent and the core showed stiff, massive, light grey, micaceous clay with wood fragments, lignite, pyrite, bivalves and forams. Early in the evening, subtle changes in the lithology were noted, moving to sticky, tan clay with forams and then olive-grey sandy clays with shell debris. This would indicate that we probably crossed through the first mid Miocene unconformities m4.6 and m4.8, located at the top of the clinoforms.

4. Core recovery details

Hole	M0028A
Cores recovered	9
Drilled length	27.45 m
Recovery length	25.61 m
Recovery	93.30%
Depth at midnight	245.73 mbsf

There was an additional 39.65 m of openhole drilling prior to commencing coring.

5. Weather

Sea swell >6 ft; E wind direction; wind speed 25-35 kt (Force 7–8); grey and overcast; intermittent showers throughout the day; 11°C.

Next 24 hrs: Sea swell 3–5 ft; E winds 5-10 kt; chance of rain and drizzle throughout the day; patchy fog later in the day; 19°C.