



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

14th June 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

Continue coring activities at MAT-2D (M0028A). Planning for the end of this hole, logging operations, salvage of casing and coring strategy for the next hole continue.

3. Science report

Core 144R (596-598 mbsf) continued the glauconitic sand seen in the last several cores. This was predominantly quartz (80-90%) in 2 size distributions: medium to coarse, sub-angular grains, and rounded granules to pebbles; the remainder was fine sand-sized glauconite. Traces of mica appeared in the very next core, as did a meter-thick, very hard glauconitic sandstone. By core 149R (610-613 mbsf) the quartz granules and pebbles disappeared, the amount of glauconite decreased, and mica became common. We believe we were now in the lower Miocene sequence m5.8. The sediment was finer in the next few cores, becoming muddy sand and then silty clay, and we ended the day with Core 153R (619-622 mbsf) in silty clay with common mica, lignite and a trace of possible shell fragments. This was the first fossil evidence we'd seen in days.

4. Core recovery details

Hole	M0028A
Cores recovered	144R to 153R (10 cores)
Drilled length	26.37m
Recovery length	20.4m
Recovery	77.36%
Depth at midnight	622.3 mbsf

5. Weather

Sea swell 2-4 ft; NE winds 5-10 kt; fair and dry; 25°C.

Next 24 hrs: sea swell 2-3 ft; E winds 5-10 kt; patchy fog, chance of showers;
21°C