

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

28th June 2009 (0000-2400, local time)

1. Location

Hole MAT-3A (Hole M0029A).

Time zone: US Eastern Time, UTC -4

Position at midnight (note this is a revised position):

Latitude: 39° 31.1705' N Longitude: 73° 24.7925' W

2. Activity summary

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

3. Science report

Drilling went ahead by continuous coring throughout the day. Recovery progressively improved and we are now recovering nearly full core barrels of sediment. We drilled 39 m of sediment and went through two coarsening upward sequences of deposition that appear to correlate with units identified on seismic line Oc270 529. The first one (273 mbsf, core 47R to 294 mbsf, core 53R) shows well-sorted, fine-grained shelly sands passing upward into moderately-sorted fine to medium-grained quartz sands with lignite capped by tight, unsorted, coarse to very coarse, pebbly sands. The second one (294 mbsf, core 54R to 315 mbsf, core 61R) is slightly finer-grained. It exhibits well-sorted, very fine-grained, silty sands with rare shell debris passing upwards into fine-grained quartz sands with shells capped by unsorted, coarse-grained sands with granules and shells. Recovery was then excellent.

4. Core recovery details

Hole M0029A

Cores recovered 47R-60R (14 runs)

Drilled length39.65 mRecovered length22.07 mRecovery55.66 %Depth at midnight312.71 mbsf

5. Weather

Sea swell 2-3 ft; NW winds 5-10 kt (became SW); cloudy in morning, sunny and dry in the afternoon; 26°C.

Next 24 hrs: sea swell 2-3 ft; SW winds 5-10 kt; slight chance of showers and thunderstorms; 27°C.