

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

30th June 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

Today was a day of excellent drilling pace and an exceptional 93% recovery. We drilled c.43 m and described three main packages of sediment. We recognized from top to base: (1) coarsening upward micaceous, slightly shelly sandy silts to fine-grained silty sands (348-361 mbsf, cores 73-77R), (2) glauconitic and lignitic micaceous, clayey silts with gastropods, bivalves and occasional diatoms and forams (361-385 mbsf, cores 78-85R), (3) same sediment as before but with no more, or hints of, glauconite and very fine-grained quartz sand laminae and burrows (385-395 mbsf, cores 86-88R). Some beds of the latter appear "very heavy" with pyritized diatoms. The first sediment package, and the last two, seems to correspond to different groups of seismic reflectors on seismic line Oc270 529.

4. Core recovery details

Hole M0029A

Cores recovered 74R-88R (15 runs)

Drilled length42.7 mRecovered length39.57 mRecovery92.67 %Depth at midnight395.06 mbsf

5. Weather

Sea swell 1-3 ft; S winds 5-10 kt (increased to 10-15 kt); slight dry and sunny; 27°C.

Next 24 hours: sea swell 2-3 ft; SE winds 5-10 kt; chance of showers and thunderstorms. 25°C.