



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

**29th 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**

Drilling went ahead in the lower Middle Miocene sediments, at a very good pace with excellent recovery. We drilled 36 m of sediment from core 61R to core 73R and sampled a complete coarsening upward sequence bounded by two surfaces that may represent unconformities. The sequence starts with a coarse glauconitic sandy clay and claystone (340-346 mbsf, cores 70-71R) lying above very fine-grained, silty quartz sand (cores 72-73R). The sequence gives rise up-section to micaceous clays (68-69R), silty clays (67-65R), well-sorted very fine to fine-grained sands with forams, lignite, micas and shell debris (64-63R), and then moderately-sorted coarse-grained sands (315 mbsf, core 62R). Core 61R caps the sequence with a return to finer-grained material with silts to very fine sands with rare shell debris. This sequence is tied with reasonable confidence to the seismic line Oc270 529.

### **4. Core recovery details**

<b>Hole</b>	M0029A
<b>Cores recovered</b>	61R-73R (13 runs)
<b>Drilled length</b>	39.65 m
<b>Recovered length</b>	34.78 m
<b>Recovery</b>	87.72 %
<b>Depth at midnight</b>	352.36 mbsf

### **5. Weather**

Sea swell 2-3 ft; SW winds 5-10 kt; dry and sunny; 27°C.

Next 24 hrs: sea swell 1-2 ft (building to 2-3 ft); S winds 5-10 kt (increasing to 10-15 kt); slight chance of showers and thunderstorms; 27°C.