



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

**26<sup>th</sup> 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° 31.1717' N

Longitude: 73° 24.7957' W

### **2. Activity summary**

Coring operations at Hole M0029A (MAT-3A). We are concentrating our spot coring intervals on critical unconformities predicted on seismic data.

### **3. Science report**

The day started by continued coring of the interval thought to include the m1 (Serravalian-Tortonian) unconformity, where we recovered four cores (27-30R). At c.157 m, the cores show coarse-grained, pebbly, light grey sands (core 27R) overlying laminated fine sands and clay/silts (cores 28-30R) that could be interpreted as the location of the m1 unconformity. We sampled then the m3 (intra-Serravalian) unconformity by recovering six cores (31-35R) across an interval centred on the predicted depth of m3. The first two cores (31-32R) returned empty. At c.193 m, the cores show unsorted, very coarse-grained and pebbly, light grey sands with a large piece of wood (core 33R) overlying laminated organic-rich clay/silts passing downward to fine sands with granules (cores 28-30R) that may likely correspond to the m3 unconformity. The day finished drilling down to an interval which is predicted to contain the m4 unconformity.

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

<b>Hole</b>	M0029A
<b>Cores recovered</b>	27R-35R (9 runs)
<b>Drilled length</b>	25.28 m
<b>Recovered length</b>	5.49 m
<b>Recovery</b>	21.72 %
<b>Depth at midnight</b>	199.36 mbsf

## **5. Weather**

Sea swell 2-3 ft; SW winds 5-10 kt; dry & sunny, thunderstorms in the evening; 28°C. Next 24 hrs: sea swell 2-3 ft; NW winds 5 kt; chance of showers and thunderstorms this afternoon; 25°C.