



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

**9<sup>th</sup> 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), with a short delay in operations late morning due to weather.

### **3. Science report**

This was a day of superb recovery from cores 92R to 108R (461-512 mbsf) in relatively uniform lithologies at the base of the Early Miocene sequence "m5.4". We began in hard silt with lignite and scattered shell fragments, but very fine to fine quartz sand began to appear with increasing frequency that by core 98R (479-482 mbsf) it had become the dominant component. Quiet depositional environments were indicated by our occasionally finding both halves of articulated bivalves and fish scales. The sand component varied downwards and by core 108R (509-512 mbsf) the day ended in micaceous, lignitic, slightly shelly silt at a depth we're anxious to correlate to Site M0027A that we completed roughly two weeks ago.

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

|                          |             |
|--------------------------|-------------|
| <b>Hole</b>              | M0028A      |
| <b>Cores recovered</b>   | 17          |
| <b>Drilled length</b>    | 51.85 m     |
| <b>Recovery length</b>   | 50.98 m     |
| <b>Recovery</b>          | 98.32 %     |
| <b>Depth at midnight</b> | 515.35 mbsf |

### **5. Weather**

Sea swell 2 - 4 ft; S / SE becoming variable in late afternoon; wind speed 10 - 20 kt; fog early morning turning to rain and thunderstorms midday; sun with patchy cloud by late afternoon; 17°C.

Next 24 hrs: Sea swell ~2 ft; E winds around 5 - 10 kt; patchy fog and a chance of showers or thunderstorms; 21°C.