

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

# 25th 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 now concentrating our spot coring intervals on critical unconformities predicted on seismic data.

#### 3. Science report

Spot coring continued throughout the day. We recovered four cores: the first two (23R-24R) in the fine-grained material at the top of a big channel at 117 and 120 mbsf, the last two (25R-26R) across the m1 unconformity at 148 and 151 mbsf. The first two were dedicated to the sampling of water for geochemistry, the last two to get some age and depositional environment controls on the surface that probably marks the huge fall in sea level at the Serravalian/Tortonian boundary. The first two cores are light grey, fine to medium-grained quartz sands with some granules and rare pebbles with no shells. The last two cores are coarse-grained, gravelly to pebbly sands but the day ended before, we think, we reached the unconformity surface.

### 4. Core recovery details

| Hole              | M0029A           |
|-------------------|------------------|
| Cores recovered   | 23R-26R (4 runs) |
| Drilled length    | 11.32 m          |
| Recovered length  | 2 m              |
| Recovery          | 17.67 %          |
| Depth at midnight | 154.11 mbsf      |

### 5. Weather

Sea swell 2-3 ft; NE winds 5 kt (became S winds 10-15 kt); dry and sunny; 26°C. Next 24 hrs: sea swell 2-3 ft; SW winds 5-10 kt; chance of showers, thunderstorms likely; 28°C.Next 24 hrs: sea swell 3-5 ft; N winds 15-20 kt (gusting 25 kt, diminishing 10-15 kt); slight chance of light rain and drizzle in the morning, chance of showers in the afternoon; 24°C.