

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

## 10th May 2009 (0000-2400, local time)

### 1. Location

Hole MAT-1A (Hole M0027A).

Time zone: US Eastern Time, UTC -4

Position at midnight: Latitude: 39° 38.04606' N Longitude: 73° 37.30146' W

### 2. Activity summary

Conducting coring operations at Hole MAT-1A (M0027A).

#### 3. Science report

Tough drilling at the start of the day was due to the granules and pebbles encountered just before midnight. Core 79R began at 224 mbsf and came up empty, followed by 80R which recovered small pebbles and gravel at the top and several very coarse sand levels in the next few meters. Silty sand fined downwards to firm silty clay with lignite, and then abruptly changed to firm, very fine sand with mica and shell fragments in core 86R at 247 mbsf. We were now getting 100% recovery and advanced quickly, and found very coarse sand units in core 96R at 274 mbsf and 98R at 280 mbsf. A very successful day with recovery values far higher than we had been anticipating.

### 4. Core recovery details

Hole	M0027A
Cores recovered	79R to 99R (21 cores)
Drilled length	62.76 m
Recovered length	59.17 m
Recovery	94.28 %
Depth at midnight	286.36 mbsf

### 5. Weather

Sea swell 3-5 ft; wind direction W; wind speed 15-20 knots; dry; 20°C. Next 24 hrs: sea swell 2-3 ft; wind direction W; wind speed 10-15 knots; chance of showers; 14°C.