

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

9th 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

We started the day in silty clay at 179 mbsf where core 64H returned with disappointing penetration. Switching to extended nose coring in 65X immediately showed results with a full 10 ft barrel of the same dense clay. Full recovery continued for most of the day. A slight change in color and the appearance of very fine quartz sand with mica and shell fragments began in core 70X at 209 mbsf. Shells and medium sand grains concentrated in layers, especially in core 73X at 211 mbsf, and the day finished with a coarsening downward trend in core 77X that ended in 15 cm of very coarse quartz sand with chert pebbles and granules in core 78X at 224 mbsf.

4. Core recovery details

Hole M0027A

Cores recovered 64H to 78X (15 cores)

Drilled length 34.76 m Recovered length 35.34 m

Recovery 101.67 % (expanding

clays)

Depth at midnight 223.6 mbsf

5. Weather

Sea swell 2-3 ft; wind direction SW; wind speed 10-15 knots; dry, lightning in the evening; 21°C.

Next 24 hrs: sea swell 3-5 ft; wind direction W; wind speed 15-20 knots (gusting up to 25 knots); dry; 20°C.