



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

18th 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

Through-HQ pipe logging (spectral gamma and VSP) completed. Open-hole wireline logging and open-hole VSP completed in the bottom interval of Hole M0028A.

3. Science report

A VSP run was completed through the PQ pipe from 396 to 22 mbsf; the interval 294-334 experienced pipe reverberations that may be difficult to overcome, but the remainder of the measured interval was largely free of noise. Preliminary analysis shows sharp first arrivals (at 2 m spacing between measurement depths) and reflections from major surfaces. To our surprise, we were able to lower the geophone out the bottom of the PQ pipe into, and below, the 20 m sand-prone interval immediately beneath that depth. Consequently, we chose to log, with the induction and acoustic imaging tools, the 425-396 mbsf interval left open when the HQ pipe was removed yesterday. This section was of high interest because it contained the facies interpreted as algal mats and oyster shells recovered sparingly in Cores 71R-75R. The tools passed through this interval with no trouble and returned excellent data: the acoustic imager was run at its highest resolution and revealed dipping beds and well-defined features that have yet to be understood fully. Efforts then turned to removing some, or all, of the PQ pipe to enable open-hole logging above 396 mbsf.

4. Core recovery details

The hole summary table has been modified to now include the 'washed' interval at the start of Hole M0028A in the hole recovery calculation. Core recovery figures remain unchanged.

Hole	M0027A	M0028A	Total
Latitude	39° 38.04606 N	39° 33.94279' N	
Longitude	73° 37.30146' W	73° 29.83481' W	
First core	02/05/09 at 00:10	26/05/09 at 15:15	
Last core	18/05/09 at 22:10	16/06/09 at 02:40	
Cores recovered	1H to 224R (224 cores)	1R to 170R (170 cores)	394 cores
Drilled length	555.3 m	476.78 m	1032.08 m
Recovered length	471.59 m	385.29 m	856.88 m
Core recovery	84.93 %	80.81 %	83.02 %
Final depth	631.01 mbsf	674.15 mbsf	
Hole recovery	74.74 %	57.15 %	

5. Weather

Sea swell 4-6 ft; S winds 10-15 kt, 15-20 kt later in the day; showers; 19°C.

Next 24 hrs: sea swell 3-5 ft (subsiding to 2-4 ft); NW winds 5-10 kt (becoming SW); fog; 25°C.