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

15th June 2009 (0000 – 0240 16th June 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 and finish coring activities at MAT-2D (M0028A).

3. Science report

Core 154R (622-625 mbsf) continued the same silty clay with common lignite and common to abundant mica that we saw the day before. The lignite and mica content began to fluctuate by core 163R (650-653 mbsf), and though we found a few calcareous concretions, no carbonate fossils were found in this facies. The day ended with core 167R (665-668 mbsf) within a few meters of the expected contact with the lowermost Miocene sequence m6. The next core confirmed our predictions when at 10 minutes past midnight Core 168R recovered an abrupt contact with hard glauconitic sand 60 cm from the top of section 1 (at 666 mbsf). The next two cores became finer grained and more indurated, and we ended Hole M0028A with Core 170R at 671-674 mbsf in hard clay containing glauconite, shell fragments, forams and echinoid spines.

4. Core recovery details

For reporting period

Hole	M0028A
Cores recovered	154R to 170R (17 cores)
Drilled length	51.85m
Recovery length	52.74m
Recovery	101.72%
Depth at midnight	674.15 mbsf

For holes completed so far

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 %	84.52 %	

5. Weather

Sea swell 2-3 ft; E winds 5-10 kt; patchy fog, sunny spells; 21°C.
Next 24 hrs: sea swell 2-3 ft; E winds 10 kt; showers; 19°C.