

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

10th July 2009 (0000 – 2400, local time)

1. Location

Hole MAT-3A (Hole M0029A).

Time zone: US Eastern Time, UTC -4

Position at midnight: Latitude: 39° 31.1705' N Longitude: 73° 24.7925' W

2. Activity summary

Coring operations at Hole M0029A (MAT-3A).

3. Science report

between 706 and 736 mbsf (cores 199R to 209R). Recovery in core 200R was greatly reduced with <15%. However, the remaining 10 cores had good recovery. The sediment shows two main packages.

The lower package (208-209R, 730-736 mbsf) comprised of light brownish grey, micaceous, massive or micro-laminated clay with vegetal debris, pyrite and calcareous nodules, barren of fossils. The upper package (201-207R, 712-730 mbsf) exhibits a fining and coarsening upward sequence, going from dark greenish-grey, poorly-sorted, very fine to medium grained, glauconite sand with granules (207R) to glauconitic clayey silt with abundant forams and diatoms (201R) and back again to moderately sorted, glauconitic sand in core 199R (706 mbsf).

The sharp change from clay to sand in core 208R (730-732.2m), already recognized in other holes, may correspond to the unconformity m5.7 on the seismic record (line oc270 529).

4. Core recovery details

| Hole | M0029A |
|-------------------|---------------------|
| Cores recovered | 199R-209R (11 runs) |
| Drilled length | 30.5m |
| Recovery length | 24.71m |
| Recovery | 81.02% |
| Depth at midnight | 736.66 mbsf |

5. Weather

Sea swell 5-6 ft reducing to ~2ft by mid afternoon; N - NE 15 - 20 reducing to 5 – 10 kts; sunny with patchy cloud; 21°C.

Next 24 hours: sea swell 3-4 ft; S winds 5-10 kt increasing to 10-15 with gusts

up to 20 kt; 24°C.