



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

14th 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

Continue logging operations at Hole M0029A (MAT-3A).

3. Science report

Today, was Bastille Day! We started the day by fixing the technical problem on the 2nd winch. At noon, we launched the Acoustic Televiwer into the hole, logged the section between 660 to 484 mbsf, and recovered it back onto the drill floor at 1800. At 1900, we started the VSP (Vertical Seismic Profile) data acquisition, through pipe, from 230 to 20 mbsf. At 2100, we started pulling up the pipes to the top of the next section at 335 mbsf.

The acoustic televiwer data was run at its highest resolution. The quality of the data is good, showing bedding planes, unconformity surfaces, facies changes, hole diameter, inclination etc. However, in places a cm-scale, dark vertical band obliterates the acoustic image. The VSP data, in the upper part of the hole, complements the dataset we acquired below 230 mbsf. The data are of average quality because of the seismic source causing the casing pipe to move, bringing it into contact with the PQ pipe, ringing the bell (!) and so bringing noise into the record, combined with an imperfect sediment contact against the casing. However, the data are still acceptable. They will provide a continuous record of velocities along MAT-3A to compare to the more detailed but discontinuous MSCL data, and will tie the hole to the seismic line Oc270 529.

4. Core recovery details

N/A

5. Weather

Sea swell 2 – 4 ft; NE winds 5-10 kt gusting 30 kt occasionally during the late morning; sunny; 28°C.

Next 24 hours: sea swell 2-3 ft; W winds 5 – 10 kt becoming S by the early afternoon, increasing to 10-15 kt by late afternoon; 25°C.