



**Daily Drilling and Scientific Report for
IODP3-NSF Expedition 501
New England Shelf Hydrogeology, 2025**



4th July 00:00 – 4th July 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.99783°N, 70.33337°W @12:00 EDT
4th July
IODP-MSP borehole M0112B
Prospectus borehole MV-08AB
Water Depth: 41m

2. Operations Report

Pumping of water from the borehole commenced at 21:20 and continued to midnight and beyond. Earlier we had completed all phases required to set the packers for the test including: drilling through the borehole plug; washing down to 82m with the NCA bit; and coring with the Alien corer to identify the depth and thickness of the clay (with 12 cores recovered). These actions allowed the safe positioning of the packer string.

3. Science Report

53 samples were taken on the 4th of July for interstitial water, geochemistry, noble gas, microbiology and paleontology. 12.08 m of core were run through the MSCL.

4. Core Recovery

Hole	M0112B
Cores recovered	12
Drilled length (Coring, m)	28.22
Drilled length (Open hole, m)	18.78
Recovered length (m)	13.74
Recovery (%)	73
Depth at midnight (mbsf)	110.82

5. Time Breakdown

00:00 – 01:30 Allowing the bentonite plug to set
01:30 – 06:10 Drill to 82.00mbsf
06:10 – 17:45 Coring using the Alien corer to 110.82mbsf
17:45 – 19:40 Condition the borehole prior to pump test
19:40 – 21:20 Set packer and prepare drill deck for pumping test
21:20 – 24:00 Commence pump test at 11.35L/min to extract 5778litres (3 x string volume) of fluid

6. Hours (inc. cumulative total) – no contractual implications can be made from these figures

In port	n/a
Transiting	n/a
Operating	24
Technical downtime	0
Weather downtime	0
Other downtime (specify)	0

7. Weather

Wins 8 kts from the NW at 12:00. Waves less than 1m. Good visibility to horizon and clear skies.

8. Planned Activity for the next 24 hours

Carry out full pump test and sampling of formation water.

9. Health and Safety and Environmental

The vessel was searched for stranded seabirds at sunrise. None were found.

The team were reminded to be aware of changing deck configuration, especially trip hazards, as we transition to the pump test.

10. Photo of the day



*Figure 1 Installing the packer in the borehole. The packer isolates the sediments containing the groundwater we want to pump.
ROBINSON@ECORD_IODP3_NSF_packer.*