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

18th June 00:00 – 18th June 24:00 East Daylight Time (UTC -4)

1. Location
Position 40.9976°N, 70.3334°W @12:00 EDT 17th of June
IODP-MSP borehole M0112A
Prospectus borehole MV-08A
Water Depth: 42m

2. Operations Report
Following the completion of the loading procedures for the boat the drill crew rebuilt the dismantled deck (required for transit) to allow them to commence coring on site MV-08A. 14 cores were recovered from Hole M0112A with the HPC corer on the 18th of June. Coring proceeded in a careful manner and a depth of 25.79 mbsf was achieved by midnight with 100% recovery.

3. Science Report
49 sets of samples were taken and analysed for interstitial water geochemistry, micropaleontology, physical properties and microbiology. 5 cores were run through the MSCL, totaling 11.45 m.

4. Core Recovery

Hole	M0112A
Cores recovered	14
Drilled length (Coring, m)	25.79 m
Drilled length (Open hole, m)	0
Recovered length (m)	25.79 m
Recovery (%)	100%
Depth at midnight (mbsf)	25.79 m

5. Time Breakdown
00:00 - 04:30 Completed boat loading procedures.
04:30 - 07:10 Rig up coring deck.
07:10 – 10:40 Complete running CHD and recover first HPC sample
10:40 – 24:00 Sample using HPC/ALN tools.

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
A steady 9 kt south southwesterly wind blew throughout the day accompanied by gentle east southeasterly 0.5 m swells. These were hard to observe as the fog reduced visibility to zero for the entire day.

8. Planned Activity for the next 24 hours
Continue to advance borehole using appropriate tools until lithology permits us to set the casing.

9. Health and Safety and Environmental
Slip hazard was identified and passed on to the team due to the damp, foggy conditions.

10. Photo of the day

Figure 1: ESO team members Antonio Ferreira and Kyle Walker-Verkuil sample a core for headspace gases (photo LEBER@ECORD_IODP_NSF_sampling5)