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

ECORD
Science Operator

11th June 00:00 – 11th June 24:00 East Daylight Time (UTC -4)

1. Location
Position 40.8746°N, 70.2697°W @12:00 EDT 8th of June
IODP-MSP borehole M0111C
Prospectus borehole MV-03C
Water Depth: 44m

2. Operations Report
The borehole was successfully advanced by open-holing using the NCA bit, and coring with the ALN bit, following a period of borehole conditioning to resolve formation squeezing and blocking in the 100-125m interval. Mixed recovery reflected the clay and sand zones cored.

3. Science Report
62 samples were taken and analysed on the 11th of June for interstitial water geochemistry, micropaleontology, physical properties, noble gas analyses and microbiology. 2 cores were run through the MSCL, with a total length of 4.28 m, plus a QA/QC core.

4. Core Recovery

Hole	M0111C
Cores recovered	8
Drilled length (Coring, m)	18.25 m
Drilled length (Open hole, m)	
Recovered length (m)	15.33 m
Recovery (%)	84%
Depth at midnight (mbsf)	163.89 m

5. Time Breakdown
00:00 - 05:30   Advancing the borehole by non-coring assembly.
05:30 - 08:40   2 ALN samples from 125.0 – 129.36 mbsf.
08:40 - 14:00   Advancing the borehole to 150 mbsf with non-coring assembly.
14:00 - 24:00   6 ALN samples recovered from 150.0 – 163.89 mbsf.

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 8 kt west south-westerly breeze blew throughout the day, with 0.5 to 1 m swell from the south. Clear skies and good visibility during daylight, with light mist reducing visibility to 3 nm at sundown.

8. Planned Activity for the next 24 hours
Continue with borehole plan: coring to c.170 mbsf and set up and run pump tests.

9. Health and Safety and Environmental
No health and safety issues were reported.

10. Photo of the day

Figure 1:ESO Geochemist Antonio Ferreira and ESO Hydrogeologist Kyle Walker-Verkuil prepare a squeeze cake sample (photo EVEREST@ECORD_IODP3_NSF_SqueezeCake).