



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



30th May 00:00 – 30th May 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.8746°N, 70.2697°W @12:00 EDT 30th of May
IODP-MSP borehole M0111B
Prospectus borehole MV-03C
Water Depth: 42m

2. Operations Report

Following an unsuccessful pumping test, the packers were recovered on deck without any issues. Drillers checked borehole by advancing back to TD, without any issue. At 3:20AM, it was decided to resume coring operations to 233.73 mbsf in order to prepare borehole for another pumping test; 2 cores were recovered but these contained only infill. The packers were lowered into the hole at 04:00. By 06:15AM, packers were set at 211 mbsf and the pump ready to start. Pumping was carried out from 06:15 to 08:00 but no water was recovered. From 08:00 to 09:00 the packer was removed and inspected and found to be functioning well. The hole was conditioned with seawater between 10:00 and 12:00 and the packer lowered again between 12:00 and 13:30 but failed to inflate. Packer was inspected and lowered again and the pump lowered by 14:00. A further pump test was carried out between 14:00 and 18:30 but did not provide good returns, and so the pump was removed by 19:30 and it was decided to displace the seawater in the hole with drilling mud. It was decided to progress the hole and return to coring using the HQ BHA, with first core on deck at 23:00 and second at 23:40.

3. Science Report

3 sample sets were taken and processed on the 30th of May for interstitial water geochemistry, micropaleontology, and microbiology. 5 cores were run through the MSCL.

4. Core Recovery

Hole	M0111B
Cores recovered	2
Drilled length (Coring, m)	9.63
Drilled length (Open hole, m)	n/a
Recovered length (m)	8.58
Recovery (%)	89%
Depth at midnight (mbsf)	240.63

5. Time Breakdown

00:00 – 03:20 Retrieve packers and assess borehole
03:20 -04:45 Core to 233.73 mbsf
05:15 Packers in hole
06:15 begin pump test
08:00-09:00 packer removal and inspection
10:00-12:00 conditioning hole
12:00-14:00 packer lowered, removed, inspected
14:00-18:30 pump testing continuing
19:30 pump removed and decision made to progress hole
19:30 – 24:00 return to coring using HQ BHA

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

In port	n/a
Transiting	n/a
Operating	20h
Technical downtime	n/a
Weather downtime	n/a
Other downtime (specify)	4h (inspection of packer and pump)

7. Weather

Winds from the SSW at 23mph. Wave height 1.12 to 1.61m. Visibility poor with fog.

8. Planned Activity for the next 24 hours

Coring hole M0111B

Assessing issues with pumptest

Crew transfer 31st Mary

9. Health and Safety and Environmental

Wet and windy conditions – to take care

Minor cut – reminder to team of first aid kit locations

10. Photo of the day



*Figure 1 Operations Manager Leo Barbosa drawing pump test plans.
MILLER@ECORD_IODP3_NSF_leosdiagrams*