



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



2nd June 00:00 – 2nd June 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.8746°N, 70.2697°W @12:00 EDT 28th of May
IODP-MSP borehole M0111B
Prospectus borehole MV-03C
Water Depth: 42m

2. Operations Report

Pumping Test #6 continued with the formation isolated below 272 mbsf. Noble gas sampling was initiated at 00:30 and concluded at 05:00. Large-scale noble gas samples were not collected due to the inability to filter the high-silt-content water. Recovery was measured from 05:00 to 08:00 and preparations for switching to coring followed immediately. At 11:00, after 2 hours of reaming, the BHA was pulled to surface due to bit wear. The bit was replaced and coring started at 15:30. By midnight 11 cores had been taken, with total progress of 23.25 meters and 55% recovery.

3. Science Report

62 sample sets were taken for interstitial water geochemistry, micropaleontology, microbiology and noble gas analysis. 3 cores were run through the MSCL with a total length of 5.88 m.

4. Core Recovery

Hole	M0111B
Cores recovered	11
Drilled length (Coring, m)	23.25 m
Drilled length (Open hole, m)	0
Recovered length (m)	12.8 m
Recovery (%)	55%
Depth at midnight (mbsf)	304.78 m

5. Time Breakdown

00:00 - 05:00 Pump test 6 conducted at 272 mbsf.
05:00 - 08:00 Measuring recovery curve
09:00 - 11:00 Removing pumping test kit and reaming hole
11:00 - 15:30 Changing BHA due to bit wear and running back in hole
15:30 - 24:00 Coring ahead

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

South-westerly wind prevailed throughout the day staying relatively steady around 10 kt. Swells were generally small at 1 – 1.5 m from the south and visibility remained clear with occasional clouds and light haze.

8. Planned Activity for the next 24 hours

Continue coring Hole M0111B

9. Health and Safety and Environmental

No H&S issues to report

10. Photo of the day



Figure 1: ESO Hydrogeologists examine the live data during the pumping test to ensure continued successful operation over the course of the test (photo [LEBER@ECORD_IODP3_NSF_pump_test6.JPG](#)).