



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



16th June 00:00 – 16th 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 drilling fluid in the drill string was displaced with water and pulled back two rods. The well started to flow quickly. The packer was lowered into the pipe and the string was pressurized to inflate the packer but this was unsuccessful. The packer could not be recovered and so 15 rods were removed from the string and a second attempt made, again without success.

Over several hours attempts to rotate the string and flush the borehole were made before the decision to run the HQ string to direct flush power and allow returns. This was partially successful but it was decided to run a gamma log through the pipe before attempting to free the packer again.

An overshot head was attached to an HQ rod and the HQ string run again. Connection was made after more flushing and the packer was recovered, intact, from the string. A vibrator was attached to the string and the ships crane used to pull the string. The pipe cutter was prepared to send down the string.

3. Science Report

4 samples were processed for geochemistry on the 16th of June. The MSCL team were caught up with scanning and enjoyed a day examining and reviewing data.

4. Core Recovery

Hole	M0111C
Cores recovered	0
Drilled length (Coring, m)	0
Drilled length (Open hole, m)	0
Recovered length (m)	0
Recovery (%)	0
Depth at midnight (mbsf)	228.36 m

5. Time Breakdown

00:00 - 01:40 Complete drilling to pump test depth, deploy and attempt to set packer.
01:40 - 06:00 Running packers and pump testing.
06:00 - 12:30 Run HQ, pump and flush hole with returns.
12:30 - 16:30 Set up logging deck and run gamma log, dismantle.
16:30 - 17:00 Run HQ string with overshot head at base.
17:00 - 18:30 Recover packer to the deck.
18:30 - 24:00 Continue to work the string whilst setting up the pipe cutting equipment.

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 11 kt easterly wind blew all day, with gentle <1 m east southeasterly swell. Visibility remained clear throughout the day, with some mist developing at times.

8. Planned Activity for the next 24 hours

Continue attempts to recover the CHD string and casing.

9. Health and Safety and Environmental

No health and safety issues were raised.

A search of the decks was completed for stranded seabirds. None were found.

10. Photo of the day



Figure 1: ESO and Science Team members enjoy the sunset on the port side of the L/B Robert (photo MOWAT@ECORD_IODP3_NSF_Deck).