



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



27th May 00:00 – 17th May 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.8746°N, 70.2697°W @ 12:00 EDT 27th of May
IODP-MSP borehole M0111B
Prospectus borehole MV-03C
Water Depth: 42m

2. Operations Report

From 24:00 to 09:00 further attempts were made to assess the problems with the hole. At 09:00 a camera was run down the borehole to confirm casing integrity, but visibility was poor. It was decided to run the image logging tool and from 09:00 to 10:30 the casing was washed with seawater and the logging equipment was prepared and rigged. At 10:30, the optical logging tool was run to shoe depth (60 mbsf) and it was interpreted that there was damage in the casing. The decision was made to switch to a different BHA assembly using PQ drill rods to 120 mbsf depth and continue coring with smaller diameter HQ drill rod BHA. At 21:00 the HQ BHA was run and coring began at a depth of 121 mbsf. At 23:50 Core 34R was recovered to deck with a length of 1.58m.

3. Science Report

All samples from cores recovered on the 26th of May processed and logged. All core run through MSCL.

4. Core Recovery

Hole	M0111B
Cores recovered	1
Drilled length (Coring, m)	1
Drilled length (Open hole, m)	n/a
Recovered length (m)	1.58
Recovery (%)	158%
Depth at midnight (mbsf)	122.52

5. Time Breakdown

00:00 – 09:00 borehole assessment
09:00 camera run to check casing integrity
09:00 – 10:30 washing down casing and preparing logging tool
10:30 run optical logging tool to shoe depth
11:00 – 21:00 preparation and setup for alternative BHA
21:00 Begin running and coring with HQ BHA
23:50 Core 34R recovered to deck

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

In port	n/a
Transiting	n/a
Operating	3h
Technical downtime	21h
Weather downtime	n/a
Other downtime (specify)	n/a

7. Weather

Wind 11mph from W at 12:00. Wave height 0.3 to 0.47 m. Clear with good visibility to horizon.

8. Planned Activity for the next 24 hours

Continue coring Hole M0111B using new BHA and assess progress

Continued sampling and MSCL protocol

9. Health and Safety and Environmental

Noted good practice from crew and X501 team while making crane lifts for logging tools.

10. Photo of the day



Figure 1 Simon Barry running the logging tool to assess borehole conditions in Hole M0111B. LEBER@ECORD_IODP3_NSF_logging1