



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



18th July 00:00 – 18th July 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.618333°N, 70.136972°W @12:00 EDT 18th July
IODP-MSP borehole M0113A
Prospectus borehole MV-04C-A
Water Depth: 53.9m

2. Operations Report

We advanced the borehole by 23.4m today and reset the casing. Although we set the casing yesterday we have not seen any cuttings returns and with the lithologies we have been coring we felt it would be better to set it in the competent clay we cored from ~73mbsf.

3. Science Report

34 samples were taken on the 18th of July for micropaleontology, sedimentology, and geochemistry. 17.46 m of core were run through the MSCL.

4. Core Recovery

Hole	M0113A
Cores recovered	13
Drilled length (Coring, m)	20.38
Drilled length (Open hole, m)	6
Recovered length (m)	17.46
Recovery (%)	86%
Depth at midnight (mbsf)	83.9

5. Time Breakdown

00:00 – 15:20 Coring with a mix of HPC & ALN as lithologies dictate.
15:20 – 20:00 Wash casing to 77 mbsf.
20:00 – 21:00 Trip CHD whilst flushing with fresh water for plug
21:00 – 21:30 Add casing plug material to the hole and pressurize the string with fresh water.
21:30 – 24:00 Allow plug material to set.

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

Winds at 8 kts from the NNW at 11:00, with waves around 1.5m Visibility improved and clear to horizon most of the day. Wind shifting to the south from 15:00.

8. Planned Activity for the next 24 hours

Complete casing plug set and continue coring with HPC/ALN barrels.

9. Health and Safety and Environmental

The decks were searched for seabirds at dawn. None were found.

The X501 team were reminded to stay hydrated and wear sunscreen in hot conditions.

A fire drill was held at 23:25 and all X501 team members, drillers and crew accounted for.

10. Photo of the day



Figure 1 Antonia Witzleb and Takeshi Hayashi carrying curated cores to put in the refrigerated reefer after they have been scanned through the MSCL. LeBer@ECORD_IODP3_NSF_reefer.