



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



8th July 00:00 – 8th July 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.99783°N, 70.33337°W @12:00 EDT 8th July
IODP-MSP borehole M0112B
Prospectus borehole MV-08AB
Water Depth: 41m

2. Operations Report

We completed the water pump test for this depth. On the whole a very successful test with many samples collected. Unfortunately we could not recover the packer and so had to trip the string when it was discovered that the rod above the BHA had a large amount of sand which had collected above the spearpoint due to the low flow of the water extraction. The sand was easily removed and the packer lifted and removed which allowed the string to be run into the borehole again.

3. Science Report

A large set (76 and subsamples) of ground water samples were taken for microbiology, geochemistry, noble gas, and water quality were taken throughout the 8th. Data was collected from the pump sensors throughout and during pump testing after samples were complete.

4. Core Recovery

Hole	M0112B
Cores recovered	n/a
Drilled length (Coring, m)	n/a
Drilled length (Open hole, m)	n/a
Recovered length (m)	n/a
Recovery (%)	n/a
Depth at midnight (mbsf)	171.7

5. Time Breakdown

00:00 – 20:30 Water extraction, monitoring flowrate, head depth, temperature, conductivity etc., carrying out rebound pump test.

20:30 – 24:00 Attempting to recover packer, trip and clear string, removing packer and run string back into the hole.

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 14 kts from the WSW at 11:00. Wave height between 1.5 and 2m. Poor visibility at 0 to 0.5 nm with fog throughout the day.

8. Planned Activity for the next 24 hours

Drill down to c.250mbsf with spot cores at 200mbsf and continuous core between 231 and 250mbsf. Set packer for third pump test.

9. Health and Safety and Environmental

The vessel was searched for stranded seabirds at sunrise. None were found.

10. Photo of the day



Figure 1 Israela Musan and Alize Longeau take a water sample for noble gas while Antonia Witzleb keeps an eye on the manifold and Takeshi Hayashi observe from the hydrogeology monitoring station. STEWART@ECORD_IODP3_NSF_NG_samples.