



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



5th July 00:00 – 5th July 24:00 East Daylight Time (UTC -4)

1. Location

Position 40.99783°N, 70.33337°W @12:00 EDT 5th July
IODP-MSP borehole M0112B
Prospectus borehole MV-08AB
Water Depth: 41m

2. Operations Report

Pumping out the borehole sea water was completed and pumping of the aquifer water was ongoing. Water samples were taken from the extracted water. The borehole produced relatively clear water which improved the filtering process and hopefully the quality of the samples. The borehole head height remained stable and the volume of water recovered was good.

3. Science Report

45 samples were taken from the pumped aquifer water for analysis of geochemistry, microbiology and noble gas analyses. Data was collected from the pump testing sensors throughout pumping.

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)	110.82

5. Time Breakdown

00:00 – 24:00 Pump out borehole volume x 3. Commence and progress the sampling protocol.

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

Wind at 4 kts from the WSW. Wave height less than 0.5 m. Visibility good to horizon at times with haze to around 4 nm. Winds increasing into the evening.

8. Planned Activity for the next 24 hours

Continue with the pump test and drill/core on to the next test interval.

9. Health and Safety and Environmental

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

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

10. Photo of the day



*Figure 1 Co-chief Becky Robinson explaining the manifold setup before pump testing begins.
Yakutchik@ECORD_IODP3_NSF_BeckyExplainsManifold.*