



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



**2<sup>nd</sup> July 00:00 – 2<sup>nd</sup> July 24:00 East Daylight Time (UTC -4)**

**1. Location**

Position 40.99783°N, 70.33337°W @12:00 EDT 2<sup>nd</sup> July  
IODP-MSP borehole M0112B  
Prospectus borehole MV-08AB  
Water Depth: 41m

**2. Operations Report**

We continued to wait for the weather blow through which would allow us to run the casing safely. This happened early morning and the casing set temporarily at 28.2mbsf where two HPC cores were recovered. Drilling continued to the top of the next coring interval which was reached at 20:15 and coring continued to midnight.

**3. Science Report**

13 samples were taken on the 2<sup>nd</sup> of July for interstitial water, geochemistry, noble gas, microbiology and paleontology. Preparations continued for groundwater pump tests.

**4. Core Recovery**

<b>Hole</b>	M0112B
<b>Cores recovered</b>	6
<b>Drilled length (Coring, m)</b>	9.65
<b>Drilled length (Open hole, m)</b>	50.17
<b>Recovered length (m)</b>	7.8
<b>Recovery (%)</b>	81
<b>Depth at midnight (mbsf)</b>	59.82

**5. Time Breakdown**

00:00 – 08:30 Waiting on weather.  
08:30 – 17:35 Run casing, run CHD string and HPC  
17:35 – 19:25 Spot sample at prearranged depth  
19:25 – 20:15 Drill with NCA to top of next spot coring interval  
20:15 – 24:00 Core using HPC & ALN

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

<b>In port</b>	n/a
<b>Transiting</b>	n/a
<b>Operating</b>	15.5
<b>Technical downtime</b>	0
<b>Weather downtime</b>	8.5
<b>Other downtime (specify)</b>	0

**7. Weather**

Winds at 12 kts from the SW at 12:00. Wave height between 1 and 2m decreasing during the day. Visibility very poor with fog most of the day.

**8. Planned Activity for the next 24 hours**

Set casing at 64.74mbsf; add bentonite plug and core to clay at the top of the aquifer.

## 9. Health and Safety and Environmental

The upper decks were searched for stranded seabirds at sunrise. None were found.

## 10. Photo of the day



Figure 1 Expedition 501 team members (L-R) Bryce Mitsunaga (Boston), Sara Polanco (Australia), and Marisa Rydzy (Berlin) putting up directions home on the expedition signposts. STEWART@ECORD\_IODP3\_NSF\_signs.