



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



**3<sup>rd</sup> July 00:00 – 3<sup>rd</sup> July 24:00 East Daylight Time (UTC -4)**

**1. Location**

Position 40.99783°N, 70.33337°W @12:00 EDT 3<sup>rd</sup> July  
IODP-MSP borehole M0112B  
Prospectus borehole MV-08AB  
Water Depth: 41m

**2. Operations Report**

Today we recovered two cores from the spot coring, finishing at 63.22mbsf. The remainder of the day was filled by setting the casing, priming the hole with a bentonite plug and waiting for that to set.

**3. Science Report**

18 samples were taken on the 2<sup>nd</sup> of July for interstitial water, geochemistry, noble gas, microbiology and paleontology. 10.88m of core was run through the MSCL.

**4. Core Recovery**

<b>Hole</b>	M0112B
<b>Cores recovered</b>	2
<b>Drilled length (Coring, m)</b>	3.4
<b>Drilled length (Open hole, m)</b>	1
<b>Recovered length (m)</b>	3.08
<b>Recovery (%)</b>	91%
<b>Depth at midnight (mbsf)</b>	64.22

**5. Time Breakdown**

00:00 – 02:00 HPC & ALN coring.  
02:00 – 14:50 Run casing over the CHD string to set within clay  
14:50 – 17:15 Casing moved during CHD trip and so had to be straightened  
17:15 – 20:10 Adding plug mix, pressurizing and adjusting the string and set at 64.22mbsf  
20:10 – 24:00 Allowing the bentonite plug to set

**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>	24
<b>Technical downtime</b>	0
<b>Weather downtime</b>	0
<b>Other downtime (specify)</b>	0

**7. Weather**

Winds at 8 kts from the SW at 12:00. Waves less than 1.5m. Visibility poor in the morning but clearing to around 1.5nm through the afternoon at points.

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

Once the plug has set we will drill through it and take HPC/ALN cores from 82mbsf to identify where to set the packer for the pump test.

## 9. Health and Safety and Environmental

An abandon ship drill was held at 06:00 and all people on board accounted for.

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

## 10. Photo of the day



Figure 1 Testing out the setup for the groundwater manifold and pump. STEWART@ECORD\_IODP3\_NSF\_manifoldtest.