



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



**25<sup>th</sup> July 00:00 – 25<sup>th</sup> 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**

A coring sandwich day. Following an unsuccessful attempt to clear the packer assembly it was agreed the pump test should be stopped and the packer was recovered to deck. The sea water in the borehole was replaced with drilling fluid and coring continued. During the late morning, it was decided to use the stronger pins for the packer, and so the bit was raised and the packer set just below the previous position and a second attempt at a pump test was started.

**3. Science Report**

Ten sets of samples were taken for micropaleontology, sedimentology, physical properties and geochemistry. 17 core sections were scanned with the MSCL, a total of 14.9 m.

**4. Core Recovery**

<b>Hole</b>	M0113A
<b>Cores recovered</b>	12
<b>Drilled length (Coring, m)</b>	40.4 m
<b>Drilled length (Open hole, m)</b>	0
<b>Recovered length (m)</b>	38.9 m
<b>Recovery (%)</b>	96.3 %
<b>Depth at midnight (mbsf)</b>	272.96 m

**5. Time Breakdown**

00:05 – 03:30 Packer recovered and borehole conditioning commenced to restart coring.  
00:05 – 11:20 Borehole advanced the using ALN corer.  
11:20 – 14:10 Drilling fluid pumped into hole and then replaced with sea water in preparation for a second pump test  
14:10 – 16:25 String tripped back to packer position, water level checked and MP1 pump run in.  
16:25 – 24:00 Water extracted from string and monitoring flow rate begun, pH, & conductivity.

**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>	
<b>Weather downtime</b>	
<b>Other downtime (specify)</b>	

**7. Weather**

A hot and very humid day with strong south westerly breezes of 17 to 20 kt, with swells up to 2 m from the south east. Visibility was good, but became increasingly hazy throughout the day, and dropped to 2 nm by evening.

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

Continue pump test at M0113A

## 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.

## 10. Photo of the day



Figure 1: Chris the driller tripping out (photo Rydzy@ECORD\_IODP3\_NSF\_CR017).