



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



**9<sup>th</sup> July 00:00 – 9<sup>th</sup> July 24:00 East Daylight Time (UTC -4)**

**1. Location**

Position 40.99783°N, 70.33337°W @12:00 EDT 9th July  
IODP-MSP borehole M0112B  
Prospectus borehole MV-08AB  
Water Depth: 41m

**2. Operations Report**

A day of drilling and coring to take spot cores at predetermined depths and locate the clays in which to set the packer for pump test #3. Expected mixed recoveries in differing lithologies, however the clays and sands were found approximately where expected. We also said farewell to some of our colleagues and welcome back to others with a transfer of X501 team members and drillers at 20:00.

**3. Science Report**

20 samples were taken for microbiology, geochemistry, noble gas and micropaleontology. 0.8 m of core were run through the MSCL.

**4. Core Recovery**

<b>Hole</b>	M0112B
<b>Cores recovered</b>	13
<b>Drilled length (Coring, m)</b>	21.32
<b>Drilled length (Open hole, m)</b>	25.5
<b>Recovered length (m)</b>	10.88
<b>Recovery (%)</b>	51
<b>Depth at midnight (mbsf)</b>	246.82

**5. Time Breakdown**

00:00 – 08:50 Non coring assembly used to drill to 200mbsf.  
08:50 – 11:15 Coring at 200mbsf.  
11:15 – 13:40 Non coring assembly used to drill to the top of expected clay above the aquifer  
13:40 – 24:00 Coring from 230mbsf to identify clay/sand interfaces.

**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 11 kts WSW at 11:00. Wave height 1 to 1.5 m. Visibility generally poor at 0 to 0.75 nm and extensive fog.

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

Complete coring programme at this depth interval, condition the borehole and set the packer in preparation for water extraction.

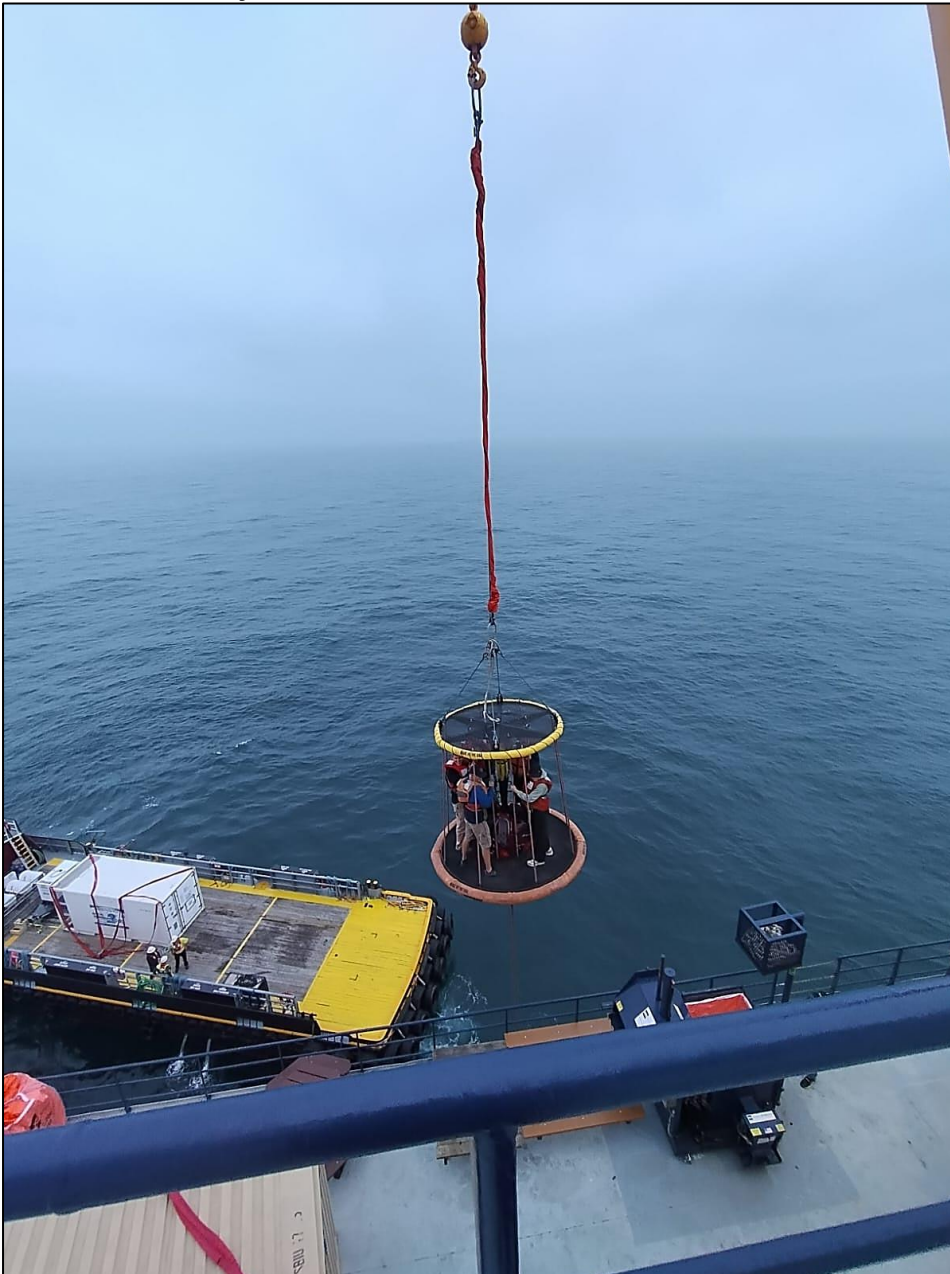
#### **9. Health and Safety and Environmental**

Operations were paused at 04:00 due to lightning in the vicinity.

X501 members were reminded of basket transfer procedures.

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

#### **10. Photo of the day**



*Figure 1 X501 team members being transferred onto the LB Robert by Billy Pugh basket after a foggy transit. STEWART@ECORD\_IODP3\_NSF\_transfer.*