



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



**20th May 00:00 – 20<sup>th</sup> May 24:00 EDT (UTC -4)**

**1. Location**

Position 40.8746°N, 70.2697°W @12:00hrs EDST 20<sup>th</sup> of May 2025

IODP-MSP borehole N/A

Prospectus borehole MV-03C

Water Depth: 42m

**2. Operations Report**

At 00:00h all crew and the X501 Science Team were onboard the LB Robert at position 41.254283°N, 72.6171°W in transit to site MV-03C. The LB Robert continued transit to site M003V location and turned to face into the prevailing northerly winds.

The vessel legs were lowered and reached seabed at 09:11h at location 40.8746°N, 70.2697°W. This is the designated set location for site MV-03C. The vessel then took on seawater as part of the pre-load sequence until 18:20h. The vessel was raised to account for wave height at 21:00h and pre-loading continued until 24:00h.

**3. Science Report**

3 samples of 1L of surface seawater taken.

**4. Core Recovery Details**

|                               |     |
|-------------------------------|-----|
| Hole                          | N/A |
| 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)      | N/A |

**5. Time Breakdown**

00:00 In transit to Site MV-03C

09:11 Vessel legs on seabed. On site.

11:00 Captain, contractor, ESO and CC meeting

11.45 Taking on water for pre-load.

12:00 Start of shifts for science team

12:00 Brief meetings for ESO and science teams to update on shifts and plan for beginning of operations

18:20 Completion taking on water. Lift above wave height. Start hold time for stabilization.

21:00 Adjustment of platform height and continued waiting for stabilization

24.00 Continued preload

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

|                          |                     |
|--------------------------|---------------------|
| In port                  | n/a                 |
| Transiting               | 09h 11m             |
| Operating                | 0.0                 |
| Technical downtime       | 0.0                 |
| Weather downtime         | 0.0                 |
| Other downtime (specify) | 14.49m<br>(preload) |

**7. Weather**

Wind 23mph (with gusts of 28mph) from the north at 12:00h. Wave height around 1m. Visibility good to horizon. Overcast.

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

Continue preload

Dump water

Jack up to operational height (~10m air gap)

Operations to begin – run casing, mix mud

Preparation of ESO containers and labs

Commence coring operations

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

N/A

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



*Luzie Shnieders and crew taking the first seawater samples at Site MV-03C. LEBER@ECORD\_IODP3\_NSF\_first\_sample*