

30th Apr 00:00 - 24:00 CDT (UTC -5)

1. Location

Position 21 Deg 27.009' N, 89 Deg 56.962' W
IODP-MSP borehole M0077A
Prospectus borehole Chix-03B
Water Depth: 19.8 m

2. Operations Report

Continued coring recovering four cores before the drilling parameters indicated high torque and the hole was flushed with mud, and maintenance carried out on the rig. Coring then resumed for the remainder of the day. The supply vessel *Linda F* visited the platform and Science Party, ESO and film crew personnel transfers were made.

3. Science Report

Science Party staffing change over occurred today and was thus the occasion for a cross-over science meeting to discuss the results to date. Micropaleontologists Lowery and Bralower disembarked along with microbiologist Cockell; impact petrologists Rae and Poelchau and co-chief scientist Morgan embarked. Throughout the day, core recovery has been quite variable. All recovered core is polymict lithic breccia or melt-bearing breccia, with the deeper sections becoming more melt rich – i.e. transitioning from melt-poor to melt-rich. The lithology is proving tricky to drill, and drilling rates have slowed. Clasts are marl, limestone, melt, and occasional granite. The green and gray clasts are identified as melt; they contain bubbles and vesicles as well as smaller clasts.

4. Core Recovery Details

Hole	M0077A
Cores recovered	11
Drilled length (Coring, m)	17.55
Drilled length (Open hole, m)	0
Recovered length (m)	14.25
Recovery (%)	81
Depth at midnight (mbsf)	699.09

5. Time Breakdown

00:00 Continue coring
00:30 Core on deck
02:00 Core on deck
03:30 Core on deck
07:30 Core on deck
08:00 Flushing with mud and carrying out rig maintenance
11:00 Crew vessel arrived to transfer personnel
14:00 Core on deck
15:25 Core on deck
16:55 Core on deck
18:30 Core on deck
20:00 Core on deck
21:10 Core on deck
23:40 Core on deck

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

In port	13.0
Transiting	3.0
Operating	479
Technical downtime	121
Weather downtime	0.0
Other downtime (specify)	0.0

7. Weather

Fair, sunny, good visibility, wave heights of 0.5 – 0.8 m; wind NE 15 Kts, Temperature 21-35°C.

8. Planned Activity for the next 24 hours

Continue coring.

9. Health and Safety and Environmental

N/A

10. Photo of the day



Science Party and ESO team members onboard the *L/B Myrtle Clowery*©ECORD_IODP.