Daily Drilling and Scientific Report for IODP/ICDP Expedition 364
Chicxulub Impact Crater 2016

5th May 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
Running pipe continued. Upon reaching the base of the hole, coring of the cement began with a cement core being recovered in the early hours. Coring continued throughout the day and was intermittently interrupted to carry out essential maintenance on the drill rig.

3. Science Report
Coring progress was slow due to lithology but the cores collected were of high quality and near 100% recovery. The cores exhibit larger clasts of mixed lithologies, from limestones to granites. Observations show evidence of greater heat as melt clasts are being entrained into the matrix while molten. Cores still classified as a melt-rich melt bearing breccia. The final core collected during the day has a large granitic clast within a thick section of melt.

4. Core Recovery Details

Hole	M0077A
Cores recovered	7
Drilled length (Coring, m)	5.7
Drilled length (Open hole, m)	0
Recovered length (m)	6.23
Recovery (%)	100.00
Depth at midnight (mbsf)	707.34

5. Time Breakdown
00:00   Continue running pipe
02:30   Start coring
03:20   Core on deck (cement core with bung)
05:07   Core on deck
06:35   Core on deck
08:45   Core on deck, carry out maintenance of the rig
10:50   Coring continued
13:45   Core on deck, carry out maintenance of the rig
17:45   Core on deck
19:30   Core on deck
23:25   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	579
Technical downtime	120
Weather downtime	0.0
Other downtime (specify)	0.0

7. Weather
Fair, partially cloudy, good visibility, wave heights of 0.5 – 0.8 m; wind N 15 Kts, Temperature 21-28°C.

8. Planned Activity for the next 24 hours
Continue coring

9. Health and Safety and Environmental
N/A

10. Photo of the day

Image: JLofi©ECORD_IODP.