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



24th 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

*Incorrectly reported as Chicx-03A previously. The borehole has not changed.

2. Science Report

The cores collected during our first day of coring are of exceptional quality although fully indurated. Largely laminated Marlstone with some ash layers, that are of early Eocene age based nannofossils and foraminifera. Core logging and microbiological sampling are being carried out routinely on the cores, but they have proved too lithified for pore water sampling. Care is being taken in the operations to monitor using micropaleontology when we may reach the Paleocene-Eocene Thermal Maximum (PETM) to avoid sampling that boundary.

3. Core Recovery Details

Hole	M0077A
Cores recovered	8
Drilled length (Coring, m)	16
Drilled length (Open hole, m)	506
Recovered length (m)	16
Recovery (%)	100
Depth at midnight (mbsf)	522

4. Time Breakdown

- 00:00 Continue tripping pipe to change to coring bit
- 02:15 Recover BHA
- 02:30 Change to coring bit and start running pipe
- 07:30 Reach base of hole, start coring
- 08:00 Core on deck
- 09:50 Core on deck
- 11:00 Core on deck
- 14:20 Core on deck
- 17:00 Core on deck
- 19:30 Core on deck
- 21:35 Core on deck
- 23:35 Core on deck

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

In port	13.0
Transiting	3.0
Operating	355
Technical downtime	109
Weather downtime	0.0
Other downtime (specify)	0.0

6. Weather

Fair, partly cloudy, good visibility, wave heights of 0.3 - 0.5 m; wind NE 10 Kts, Temperature 24-29°C.

7. Planned Activity for the next 24 hours

Continue coring.

8. Health and Safety and Environmental N/A

9. Photo of the day



Core on deck. JLofi © ECORD_IODP