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



15th 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-03A Water Depth: 19.8 m

2. Science Report

Downhole logging operations were carried out. Upon completion of the VSP data acquisition, part of the tool initially got blocked below the pipe entrance but whole string was successfully recovered on the rig floor. The remainder of the wireline logging proceeded with the running of the standalone induction tool which confirmed the low resistivity of the drilled formation. A tool string comprising the acoustic borehole imager and spectral natural gamma ray was successively run from 498 m to 162 mWSF providing an acoustic image of the entire hole when combined with logging data collected the previous day. Borehole images are of good quality. The borehole fluid probe, sonic and spectral natural gamma ray tools were stacked and run to 493 mWSF where the measured borehole fluid temperature reached 43.5°C. Following the acquisition of optical borehole images and spectral gamma ray logs between 91 and 55 mWSF, the first phase of logging activities were completed

3. Core Recovery Details

Hole	M0077A
Cores recovered	N/A
Drilled length (Coring, m)	N/A
Drilled length (Open hole, m)	503
Recovered length (m)	N/A
Recovery (%)	N/A
Depth at midnight (mbsf)	503

4. Time Breakdown

00:00 Downhole logging underway

- 15:15 Downhole logging completed
- 15:45 Started to trip out drill string
- 18:30 Completed tripping drill string and commenced preparations to run casing
- 21:00 Running casing
- 24:00 Running casing continues

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

In port	13
Transiting	3
Operating	242
Technical downtime	5
Weather downtime	0
Other downtime (specify)	0

6. Weather

Fair, sunny, good visibility, wave heights of 0.3 - 0.5 m; winds variable NE 15 kts, Temperature 21-30°C.

7. Planned Activity for the next 24 hours

Continue running casing to 500 mbsf, setup for coring.

8. Health and Safety and Environmental

N/A

9. Photo of the day



Photograph by EPM © ECORD/IODP Members of the Expedition 364 Science Party on route to the *L/B Myrtle*