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



29th 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 2 cores before the drilling parameters indicated the bit was not cutting efficiently. The pipe was tripped and the bit changed. After running in pipe, coring recommenced and a core was recovered before the end of the day.

# 3. Science Report

Coring into polymict lithic breccias continues with some evidence of basement clasts now present. At Core 60R a ~30 cm altered zone with an orange red mineral was observed and smear slides from this interval showed there are a large range of minerals present with the most abundant being clear and fibrous in structure. Increasing clast sizes with some up to several cm in width and evidence of a few basement clasts. Microbiology sampling continued every 9 m and MSCL data show increasing magnetic susceptibility.

#### 4. Core Recovery Details

Hole	M0077A
Cores recovered	3
Drilled length (Coring, m)	7.35
Drilled length (Open hole, m)	0
Recovered length (m)	7.21
Recovery (%)	98
Depth at midnight (mbsf)	681.54

#### 5. Time Breakdown

00:00 Continue coring

02:15 Core on deck

03:50 Core on deck

05:00 Start tripping pipe

15:00 Finish tripping pipe, change bit

16:40 Start running in pipe

23:00 Start coring

23:55 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	468
Technical downtime	117
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 21-30°C.

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

Continue coring.

# 9. Health and Safety and Environmental

N/A

# 10. Photo of the day



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