

**Daily Drilling and Scientific Report for IODP Expedition 357  
Atlantis Massif Serpentinization and Life, 2015**



**9<sup>th</sup> Nov 00:00 - 24:00 Local Time (-2 GMT)**

**1. Location**

30° 7.707' N 42° 9.198' W  
IODP-MSP M0071A  
Prospectus borehole AM-04A  
Water Depth: 1389m

**2. Science Report**

MeBo coring at Hole M0070A (proposal site AM-07A) resulted in three cores arriving on deck at 06:00. The cores consisted of lithified basaltic breccia with variably-sized blocks set in a fine pelagic carbonate sand. Samples for microbiology, geochemistry and contamination testing were collected from cores 2R and 3R, with the rest of the material archived for OSP sampling. Due to rupture of the wireline overshot wire, no logging or borehole plugging was attempted at this site. Prior to drilling at M0070A, a water column profile for geochemistry and microbiology was collected over the site with the ship's CTD Niskin rosette. Three Niskin water bottles on the rock drill were collected at the end of active drilling for comparative geochemistry and microbiology analyses. A sensor package on the rock drill collected logs of methane, pH, dissolved oxygen and redox while drilling.

**3. Core Recovery Details**

<b>Hole</b>	M0070A
<b>Cores recovered</b>	3
<b>Drilled length (Coring, m)</b>	4m
<b>Drilled length (Open hole, m)</b>	0
<b>Recovered length (m)</b>	2.09m
<b>Recovery (%)</b>	52.25

**4. Weather**

Generally sunny with good visibility. Low NNW swell. Maximum temperature of 25°C. Winds variable and light. Next 24 hours: Fair with maximum sea swell of 2 – 3 m.

**5. Planned Activity for the next 24 hours**

Continue coring operations at M0071A (AM-04A).

**6. Photos of the day**



Descriptions at the microbiology sampling station. CarolCotterill@ECORD\_IODP



MeBo being deployed at M0071A (AM-04A). DaveSmith@ECORD\_IODP