

8<sup>th</sup> April 2016 – 15<sup>th</sup> April 2016

### 1. Hole summary

Hole	M0077A
Latitude	21°26.996' N
Longitude	89°56.968'W
First core	N/A
Last core	N/A
Cores recovered	N/A
Drilled length (Coring)	N/A
Drilled Length (Open Hole)	503 m
Recovered length	N/A
Depth in hole	503 m
Hole recovery	N/A

### 2. Science

During open hole drilling, cutting samples were taken from mud that was recirculated from the hole to the drill floor. Due to loss of mud at 82 mbsf, no cuttings were recovered beyond this depth.

Members of the science party arrived on board and assisted ESO staff in getting laboratories ready for sampling and initial analyses. The first phase of logging operations was carried out. The first logging tool deployed down hole was the electrical resistivity tool. Results indicated surprisingly low resistivity in the upper 428 mWSF. The stackable acoustic borehole imager and spectral natural gamma ray were run to 165 mWSF. These tools were then recovered to allow for a vertical seismic profile (VSP) to be carried out in daylight and marine mammal/protected species observation.

The VSP tool was run into the hole and successful triggering between mini-GI gun source and VSP seismic sondes was confirmed. The VSP was lowered to the base of the hole to acquire stacks of 5 shots 10 seconds apart for every station uphole. Station spacing for VSP was 1.25 m until the top of the tool string reached 125 mWSF and then spacing was coarsened to 2.5 m. VSP quality was excellent and indicated the base of the borehole is equivalent to 452 ms depth within the seismic data.

Upon completion of the VSP, logging operations continued with the deployment of the standalone induction tool. A tool string comprising acoustic borehole imager and spectral natural gamma ray was then run from 498 mWSF to 162 mWSF to complete the logging run terminated prior to the VSP. The final tool string comprised a borehole fluid probe, sonic and spectral natural gamma ray.

Gamma ray log shows clear variability down hole with a mean value around 132 API and acoustic borehole images are of good quality. Low resistivity was confirmed with the standalone induction tool and the measured borehole fluid temperature reached a maximum of 43.5°C.

### 3. HSE Activity

All staff were given a HSE briefing immediately on boarding the vessel.

### 4. Outreach Activity

On April 13 a press conference was held in Merida to advertise the start of the expedition. Presentations were given by and Sean Gulick (Co-chief scientist) and Claire Mellett (EPM). The press conference was well attended and coverage in local media was high.

## 5. Figures

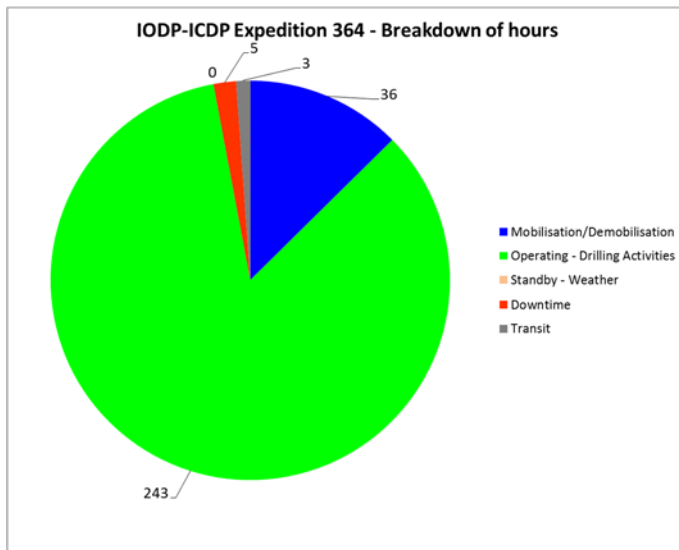


Figure1: Breakdown of hours from the start of mobilisation to 24:00 April 15<sup>th</sup>.

## 6. Photographs



Photograph by EMP © ECORD\_IODP  
Personnel transfer to the platform.



Photograph by J. Everest © ECORD\_IODP  
Crew boat alongside the *L/B Myrtle*.