Daily Coring and Scientific Report for IODP Expedition 389 Hawaiian Drowned Reefs

16^h October 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

1. Location at 24:00

Position: 19°52.035'N, 154°58.328'W Water Depth: ~ 339 m

2. Operations Report

With one borehole completed and another started before the cores from the first had all been extruded from the barrels, this counts as one of the busier days of the expedition so far. Coupled with the exceptionally high recovery in M104A, all the crew can feel justifiably pleased with their achievements.

3. Science Report

Core curation completed for Hole M104A. MSCL logging and lithological descriptions were in progress for M104A at midnight.

4. Core Recovery Details

Hole	M104A	M105A
Cores recovered	37	N/A
Drilled length (Coring, m)	2.75	22.16
Drilled length (Open hole, m)	N/A	N/A
Recovered length (m)	46.39	N/A
Recovery (%)	92.67	N/A
Depth at midnight (mbsf)	N/A	22.16

5. Time Breakdown

00:00 - 03:20 Advancing M104A by rotary coring. Borehole terminated by ESO at 46.60 mbsf.

03:20 – 04:48 Recover seafloor corer to deck and commence transit to HIL-03A.

04:48 – 09:50 Commence deck ops to recover core barrels from corer, extrude and cut liner and curate core.
09:50 – 24:00 Coring operations on M105A: advancing by rotary coring and casing as required, 22.16 mbsf achieved by midnight. Core curation for M104A completed around 14:00.

6. Hours - no contractual implications can be made from these figures

In port	0.0
Transiting	0.0
Operating	24.0
Technical downtime	0.0
Weather downtime	0.0
Mobilisation	0.0

7. Weather

Partially sunny. Wave heights of 0.2 - 0.3 m and swell 0.7 - 1.7 m; wind direction SSE to ESE at 6 - 10 kts, gusting 4 - 8 kts; Temperature 24 - 25°C.

8. Planned Activity for the next 24 hours

- Complete borehole M105A.
- Transit to the next planned location TBC.

9. Health and Safety and Environmental

- Toolbox talks at 11:30 and 23:30 for all on shift. EPM and Ops Manager attended Contractor Toolbox talk at 11.45 and EPM at 23:50. Information disseminated to remainder of Science Party.
- Brief port call for planned medivac.





10. Photo(s) of the day



Awaiting cores on deck. Photo by HannahGrant@ECORD_IODP.