

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



19<sup>th</sup> October 00:00 - 24:00 HST Hawaii Standard Time (UTC -10)

### 1. Location at 24:00

Position: 19°50.107'N, 156°05.5578'W  
Water Depth: ~ 146 m

### 2. Operations Report

A difficult and disappointing start to the day as there was no advancement in M106B and therefore after several hours of trouble with the ground conditions it was decided to terminate the borehole at 16.27 mbsf. There followed a transit from South Point to a more familiar area as we returned to M99 with a plan to increase the terminal depth of 31.8 mbsf in M99E. By midnight, we had managed to wash-out to 16.14 mbsf and case to 10.275 mbsf.



### 3. Science Report

Cure curation, MSCL logging and lithological descriptions were completed for M106B.

### 4. Core Recovery Details

Hole	M106B	M99G
<b>Cores recovered</b>	10	N/A
<b>Drilled length (Coring, m)</b>	9.26	16.14
<b>Drilled length (Open hole, m)</b>	6.88	16.14
<b>Recovered length (m)</b>	2.98	N/A
<b>Recovery (%)</b>	32	N/A
<b>Depth at midnight (mbsf)</b>	N/A	16.14

### 5. Time Breakdown

00:00 – 08:12 Attempt to set casing in M106B from 12.87 mbsf. Difficult ground, including suspected sand and gravel caused this to stall at 15.62 mbsf. Wash bored to 16.11 mbsf but could not retrieve the washbore. After several attempts the bore was eventually recovered but when the casing was removed from the borehole only one section was connected. Borehole terminated.

08:12 – 10:28 Recover corer to deck, remove core barrels and complete repairs.

10:28 – 19:00 Transit to KAW-02Ce offset at Site M99.

19:00 – 19:52 Deploy seafloor corer and settle on location.

19:52 – 24:00 Advance borehole M99G by washboring and setting casing as required to 16.14 mbsf.

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

<b>In port</b>	0.0
<b>Transiting</b>	8.53
<b>Operating</b>	11.38
<b>Downtime</b>	4.09
<b>Weather downtime</b>	0.0
<b>Mobilisation</b>	0.0

### 7. Weather

Partially sunny, good visibility. Wave heights of 0.3 – 1.1 m and swell 0.2 – 1.3 m; wind direction N to ESE at 8 – 20 kts, gusting 8 - 26 kts; Temperature 24 - 26°C.

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

- Continue coring operations at M99.

## 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.

## 10. Photo(s) of the day



Lead EPM Hannah Grant writing up the progress of borehole M99G.  
Photo by AlexWuelbers@ECORD\_IODP.