

16th Sep 00:00 – 16th Sep 24:00 GMT

1. Location

10° 6.507' E 55° 0.299' N

BSB-3 – Lille Baelt

Water Depth: 31.2m (from keel)

2. Activity Summary

Continued operations at M0059B.

3. Science Report

Hydraulic piston coring started from 60 mbsf in Hole B. Initially, coring recovered the homogeneous late glacial clay. No microfossils were found apart from a few foraminifera at 70 mbsf. This is a similar finding as in Hole A where the entire glacial clay sequence was devoid of microfossils apart from a few foraminifera found at 68 mbsf. There is no other indication of transient marine conditions at that depth, so the few foraminifera may possibly be present due to redeposition. Foraminifera suddenly became abundant at the bottom of the glacial clay at 83 mbsf. At 84 mbsf there was a very abrupt shift from glacial clay to well-sorted, medium sand. The core catcher sample from 85.8 mbsf displayed redeposited sea urchin pieces and limestone fragments, very few benthic foraminifera and some plant remnants. At 89.3 mbsf a hard diamicton was encountered. The material in the core catcher indicates a diamicton with a high frequency of crystalline rock fragments with grain sizes ranging from sand to stones with only a small portion of silt. Tills with this composition are known to have a north-easterly province and can be attributed to the main ice advance over the area reaching the LGM at c 23 to 21 kyr BP. Therefore, it seems likely that the recovered diamicton can be attributed to this ice advance.

4. Core Recovery Details

Hole	M0059B
Cores recovered	13
Drilled length	30.86 m
Recovered length	24.07 m
Recovery	78.0%
Depth at midnight	94.3 m

5. Weather

Showers, swell of 0.6 – 0.7 m; wind direction WSW - SW, winds of 21 - 23 kts gusting 26 - 40 kts; 14°C.

Next 24 hrs: Showers, swell of 0.7 – 0.9 m, winds of 20 – 26kts, gusting 25- 42 kts. 12°C.

Cold front moving across region.

6. Planned Activity for the next 24 hours

Continue coring operations on the second Paleooceanographic hole (M0059B) at BSB-3.

7. Photo of the day



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