

Daily Drilling and Scientific Report for IODP Expedition 347,
Baltic Sea Paleoenvironment



22nd Oct 00:00 – 22nd Oct 24:00 GMT

1. Location

15° 13.585' E 55° 43.267' N

BSB-5, Hanoë Bay

2. Activity Summary

Complete coring activities at M0064C, attempt to log M0064C and then begin coring operations on M0064D.

3. Science Report

The coring of Hole M0064C continued with good recovery of the hard and clayey diamicton down to 38 mbsf where a sorted gravel was encountered. Despite several attempt no sample was collected from this gravel apart from one stone with silt coating recovered from 42 mbsf. The cretaceous bedrock was reached at 45 mbsf and a piece of the bedrock was successfully recovered.

After finishing the Hole M0064C, the *Greatship Manisha* moved 10 m to the new site M0064D which is located halfway between holes M0064A and M0064C. The coring started and the four first cores returned brownish glacial clay without any visible varves. At 12 mbsf sand and gravel was present in the lowermost part of the core. As could be expected, the following core from 16 mbsf recovered greyish brown clay with a large portion of sand and gravel which is typical for the lowermost, proximal part of a glacial clay sequence.

4. Core Recovery Details

| Hole | M0064C | M0064D |
|----------------------------|---------|-----------|
| Cores recovered | 29 | 10 |
| Drilled length (Coring) | 27.3m | 20.4m |
| Drilled length (Open hole) | 2m | 0 |
| Recovered length | 22.65m | 19.37m |
| Recovery | 82.97% | 94.95% |
| Depth at Midnight | 45 mbsf | 20.4 mbsf |

5. Weather

Rain showers becoming overcast, wave heights of 0.5 – 1.25 m; winds SE, 14 - 22 kts, gusting to 25 kts; Max 16°C.

Next 24 hrs: Patchy mist / fog, wave heights of 0.8– 1.2 m, winds SSW, 23 –28 kts, gusting to 35 kts. 12°C. Increased chances for fog and mist due to an occluded low near Scotland. This will push northeastwards, causing winds to shift to a more westerly direction.

6. Planned Activity for the next 24 hours

Complete coring activities at M0064D, attempt to log the hole and then transit to BSB-7, Bornholm Basin, to begin operations.

7. Photo of the day



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Core barrel showing basement chalk with overlying gravels at base of diamicton