

## Lithology and paleoenvironments at drilled Site C0020 off the Shimokita Peninsula, IODP Exp. 337

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Marine subsurface hydrocarbon reservoirs and the associated microbial life in continental margin sediments are among the least characterized Earth systems that can be accessed by scientific ocean drilling. We penetrated a 2,466 m-deep sediment sequence with a series of coal layers around 2 km below the seafloor. Here, we report the lithology of sediments and paleoenvironments from drilling Site C0020, IODP Expedition 337. Based on macroscopic and microscopic description of cutting and core samples during this expedition, which was supported by XRD and XRF data as well as all available data (e.g. logging, micropaleontology and physical properties data) we defined four different lithologic units present in Site C0020. The succession of lithofacies at Hole C0020A also provides insight into the evolution of depositional environments in the site region.

Keywords: IODP Exp.337, Marine subsurface hydrocarbon reservoirs, microbial life, depositional environments