

Mo A04

## Shallow Geology, Shallow Faults and Fluid Flow in Western Barents Sea

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### SUMMARY

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With the awarding of Lundin Norway's first exploration license in the Barents Sea, PL438 in 2007, an extensive research program was initiated, concerning shallow sediments, fluid flows and the environment.

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The program has involved several academic institutions, eg. NGU and FFI, as well as commercial expertise.

From the initiation and to this date, a substantial amount of data has been acquired concerning shallow geology and processes in the shallow sediments and the sea bed. A large amount of sediments samples, carbonate crusts and gas samples have been collected.

Moreover, a large amount of high technological physical data such as: bathymetry from multibeam echosounder; and various data recorded from the HUGIN HUS AUV, including optical photo, synthetic aperture sonar data and various other physiochemical data have been acquired.

This extensive database has given new insights into the behaviour of fluid flow following the glaciations, its link to deeper tectonic elements, sediment types and the expressions on the sea floor.