

Post-Basalt deposits in the Faroese sector of the Faroe-Shetland Basin, NE Atlantic Ocean

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Abstract

In the mid nineties the oil industry became more interested in the Faroese area of the Faroe-Shetland Basin. During this time, the main focus has been on sediments beneath the Palaeocene-Eocene flood basalts, which cover most of the Faroese Continental Shelf. But after the discoveries made in intra- and post-basalt succession in UK sector of the Faroe-Shetland Basin such as Cambo, Rosebank and Tobermory discoveries, it seems more obvious and interesting to look at these layers in the Faroese area of the basin in more detail.

Most of the literature that exists about the post-basalt related sediments is concentrating around the UK sector of the basin and these study shows sediments being deposited from the S to SE (the NW British shelf area). These sediments are of siliciclastic origin and have been shown to be of a very good reservoir quality. However, in this study who is focusing on the Faroese area of the Faroe-Shetland Basin show that sediment has also been derived from the Faroe Platform and Munkagrannur Ridge and deposited in the basin. Munkagrannur Ridge and Faroe Platform are both structures that are wholly made up of basaltic material; and therefore the sediment derived from these source areas will be of volcanoclastic composition. With this study we will get a better understanding of the post-basalt sedimentary packed and can build up an understanding of the sediment packed in relation to for example sedimentary processes, depositional type, sea-level changes, sediment input direction etc. and what influence these different input directions could have on the quality of a prospective future intra- and post-basalt reservoir.