

Aasta Hansteen – First gas on Vøring

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Deep-water Norwegian Sea is a frontier area on the Norwegian Continental Shelf with water depths greater than 1000 meter. Exploration within the last 15 years shows a prospective potential in the Vøring Basin, and the area is now opening up for gas production with Aasta Hansteen as the first field development. A “Plan for Development and Operation” was submitted 21st of December 2012.

The Aasta Hansteen Field is a lean gas condensate field which comprises three gas discoveries in the Campanian Nise Formation. Nise Formation is interpreted to be turbidite sandstones in a large fan system covering the Vøring Basin.

The main deformation phase in the area was Maastrichtian – early Paleocene, which means that the reservoir section was deformed just after deposition. The system is sand-rich and the anticipated shallow burial depth at time of deformation did not seem to produce cataclastic faults and decreased permeability. In addition, the present day reservoir temperature is well below quartz cementation window (~90°C). Thus, these sand rich fault rocks are expected to be open. No internal clay smear is expected within the reservoir section based on the petrographical properties described from the wells.

The reservoir is planned drained by seven producers by pure pressure depletion. The recoverable reserves are estimated to 46.5 billion Sm³ rich gas and 0.9 million Sm³ of condensate. The development of Aasta Hansteen is interdependent upon a parallel development of a new gas transport pipeline from Aasta Hansteen to Nyhamna for the rich gas export. Gas is planned produced from the field by Q3 2017.

The field installations at Aasta Hansteen comprise a spar floater with condensate storage. The spar floater will be the first of this kind on the Norwegian Continental Shelf, at 1300 meters sea depth. The floating platform is tied to a subsea production system. The Aasta Hansteen floater and the deep water workover system have technology elements that are classified as new.

The awards in the twentieth licensing round include 12 production licenses in the Norwegian Sea. The majority of these blocks are close to Aasta Hansteen. Increased exploration activity is expected in the area in the coming years and it may become relevant to use the Aasta Hansteen platform with associated export pipeline, or just the export pipeline for any new discoveries in the Vøring area.