

OIL AND GAS FIELDS IN NORWAY

INDUSTRIAL HERITAGE PLAN



NORSK OLJEMUSEUM

SKARV

An oil and gas field located in 350-450 metres of water, Skarv lies in the Norwegian Sea about 200 kilometres off Helgeland in northern Norway, 30 south of Norne and 60 north of Heidrun.

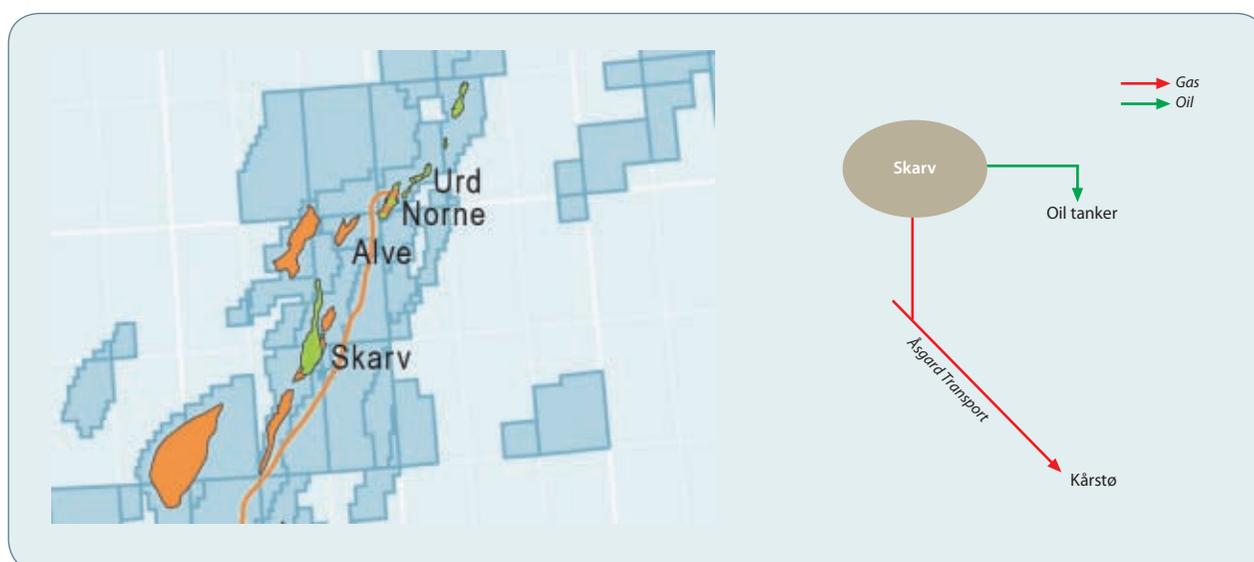
This development represents a unitisation of two deposits – 6507/5-1 Skarv and 6507/3-3 Idun. The Storting approved the PDO in December 2007, and the field is due to come on stream in the second half of 2011.

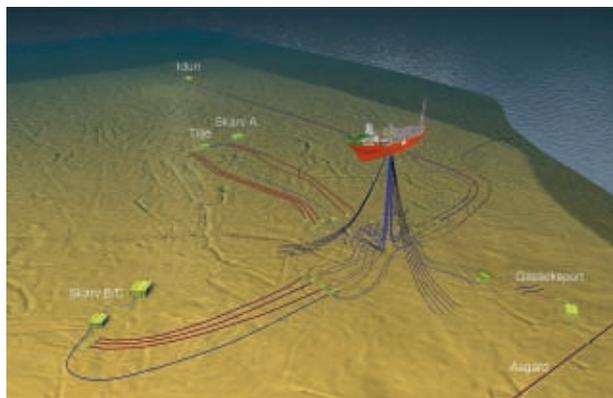
Operator BP has resolved to locate the supply base and an operations support unit at Sandnessjøen. Established in 2008, the support unit is responsible for logistics, procurement, maintenance and modifications. The heliport will be at Brønnøysund, while other functions in the operations organisation are in Stavanger. The Skarv production ship offers 100 berths in single cabins, and BP intends to recruit 118 people split between three tours. In addition come contract services. A number of large contracts have been awarded in Helgeland, yielding positive local spin-offs. BP is the first foreign operator on the NCS to develop a field so far to the north.



Reservoir and recovery strategy

Gas and condensate are contained in sandstones belonging to the Garn, Ile and Tilje formations of middle and early Jurassic age. The Skarv deposit also has an underlying oil zone in the Garn and Tilje. Reservoir quality is good in the Garn but relatively poor in the Tilje. Located 3 300-3 700 metres down, the reser-





The Skarv subsea installations tied back to the production ship.
Illustration: BP Norge

voirs are divided into several fault segments. Plans call for gas to be injected back into the Garn and Tilje formations during the early years to improve oil recovery.

Transport

The partners in Skarv have resolved to transport the gas to Kårstø via a new 80-kilometre export pipeline tied into the Åsgard Transport system. Oil will be loaded into shuttle tankers on the field.

Development solution

Skarv is being developed with five subsea templates

Skarv

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|-----------------------------|--|
| Blocks | 6507/2, 6507/3, 6507/5 and 6507/6 |
| Production licences Awarded | 159, 212, 212 B and 262 1986, 1989, 2000 and 2002 |

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|----------------------------|--|
| Total recoverable reserves | 104 mill bbl oil 41.5 bn scm gas 5.4 mill tonnes NGL |
|----------------------------|--|

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|--------------------------|--------------|
| Discovery year | 1998 |
| Approved for development | 18 Dec 2007 |
| On stream (planned) | 2011 |
| Operator | BP Norge |
| Operations organisation | Stavanger |
| Main supply base | Sandnessjøen |

Licensees

| | |
|--------------------|--------|
| BP Norge | 23.84% |
| Statoil | 36.16% |
| E.ON Ruhrgas Norge | 28.08% |
| PGNiG Norway | 11.92% |

tied back to an FPSO. Measuring 292 by 50 metres, this BP-operated vessel will be the largest of its kind on the NCS and provide 875 000 barrels of oil storage.



Skarv FPSO approaching Stord Verft after a 93 days long journey from South Korea. Photo: BP Norge