

OIL AND GAS FIELDS IN NORWAY

INDUSTRIAL HERITAGE PLAN



NORSK OLJEMUSEUM

GRANE

This oil field lies east of Balder in 128 metres of water, and was discovered by Norsk Hydro in 1991. On stream since 23 September 2003, it is operated by Statoil.

Reservoir and recovery strategy

Grane comprises a main structure and several smaller ones. The reservoir is Tertiary sandstone with good properties. Its oil is heavy and demanding to recover, with gas lift accordingly required for production. However, the field contains very little gas and so receives supplies via the Heimdal gas centre through a 50-kilometre pipeline. Gas is also injected for pressure support in the reservoir to boost production and ensure a high recovery factor. After about 25 years of oil output, a large proportion of the gas will be recoverable for sale. Production has stabilised at more than 200 000 barrels of oil per day.

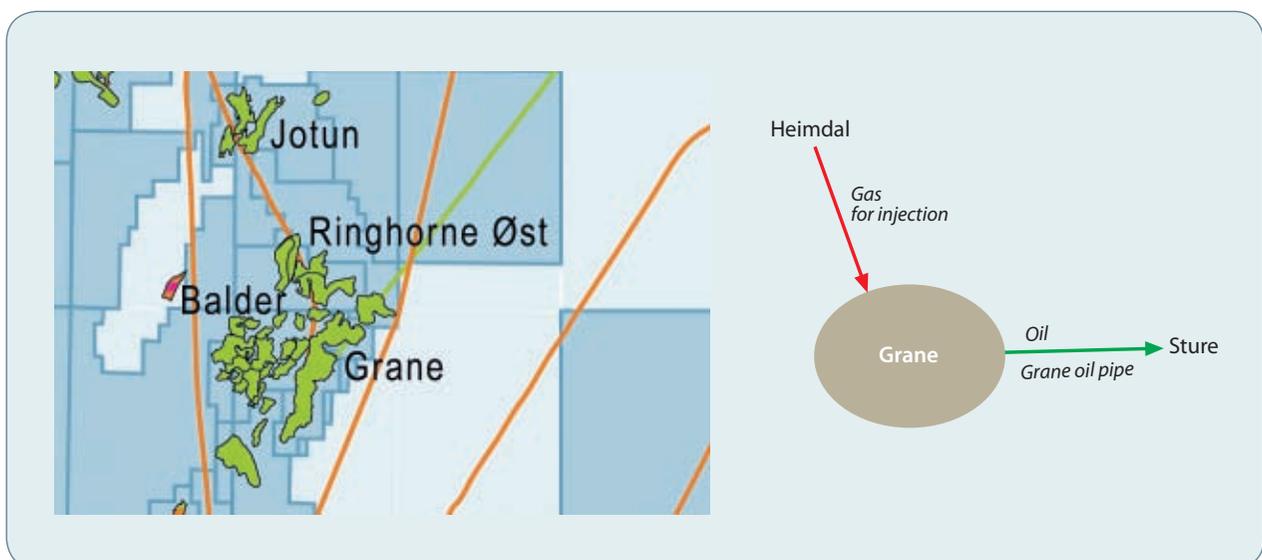
Transport

Oil from Grane is piped through a 212-kilometre line to the Sture terminal west of Bergen for storage in large rock caverns before being shipped to market.



Development solution

The field has been developed with an integrated production, drilling and quarters platform supported on a steel jacket. Forty well slots are provided.





The Grane platform. Photo: Norsk Hydro

Grane

Block	25/11
Production licences	001 and 169 B1
Awarded	1965 and 2000
Total recoverable reserves	730.9 mill bbl oil
Remaining at 31 Dec 2008	398.8 mill bbl oil

Discovery year	1991
Approved for development	14 Jun 2000
On stream	23 Sep 2003
Operator	Statoil
Operations organisation	Bergen
Main supply base	Mongstad

Licensees

Statoil	38.0%
Petoro	30.0%
ExxonMobil	25.6%
ConocoPhillips	6.4%