

# 12 Fields in production

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## Explanation of the tables in chapters 12–14

Interests in fields do not necessarily correspond with interests in the individual production licences (unitised fields or ones for which the sliding scale has been exercised have a different composition of interests than the production licence). Because interests are shown up to two decimal places, licensee holdings in a field may add up to less than 100 per cent. Interests are shown at 1 January 2003.

Recoverable reserves originally present refers to reserves in resource categories 0, 1, 2 and 3 in the NPD's classification system (see the definitions below).

Recoverable reserves remaining refers to reserves in resource categories 1, 2 and 3 in the NPD's classification system (see the definitions below).





Resource category 0: Petroleum sold and delivered

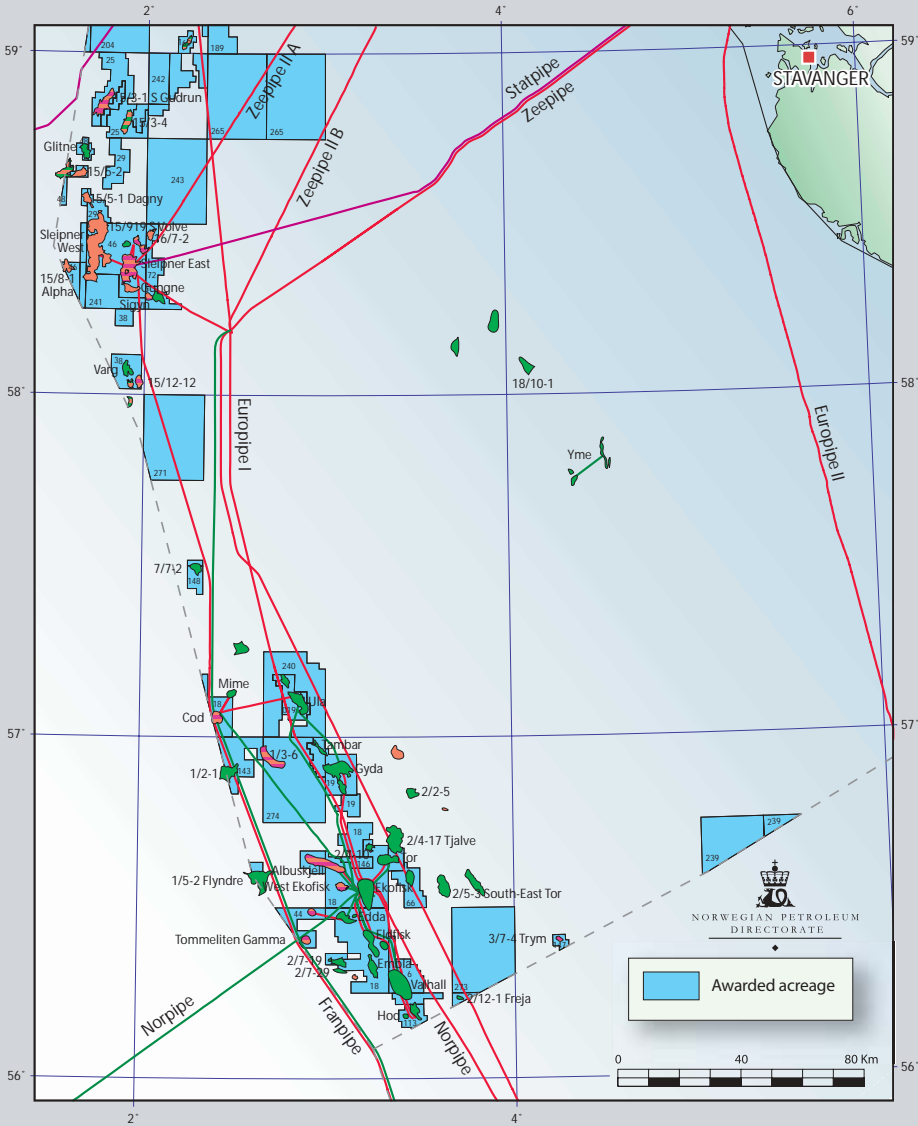
Resource category 1: Reserves in production

Resource category 2: Reserves with an approved plan for development and operation

Resource category 3: Reserves which the licensees have decided to develop

## Explanation of the figures

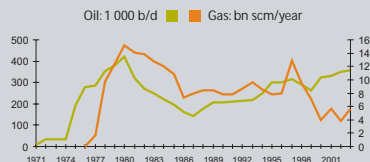
-  Oil: 1 000 b/d
-  Gas: bn scm/year
-  NGL: mill tonnes/year
-  Condensate: mill scm/year



## Southern North Sea sector

The southern part of Norway’s North Sea sector became important for the country at an early stage, with Ekofisk as the first Norwegian offshore field to come on stream more than 30 years ago. Ekofisk serves as a hub for petroleum operations in this area, with surrounding developments utilising the infrastructure which ties it to continental Europe and Britain. Norwegian oil and gas is exported from Ekofisk to Teesside in the UK and Emden in Germany respectively.

Although production from this part of the NCS has lasted for many years, remaining resources in the region are substantial. Oil and gas output is accordingly expected to continue beyond another three decades.



# 12

## Ekofisk area (incl Ekofisk, Eldfisk, Embla and Tor)

### Ekofisk, Eldfisk and Embla

<b>Blocks and production licences</b>	Blocks 2/4 and 2/7 - production licence 018. Both blocks awarded in 1965.	
<b>Progress</b>	On stream in 1971	
<b>Operator</b>	TotalFinaElf Exploration Norge AS	39.90%
<b>Licensees</b>	ConocoPhillips Norge	35.11%
(rounded off to two decimal places)	Norsk Agip AS	12.39%
	Norsk Hydro Produksjon a.s	6.65%
	Petoro AS <sup>1</sup>	5.00%
	Statoil ASA	0.95%
<b>Recoverable reserves</b>	Originally present: 574.1 mill scm oil 225.4 bn scm gas 17.8 mill tonnes NGL	Remaining at 31.12.02: 182.7 mill scm oil 68.7 bn scm gas 3.6 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 354 000 b/d Gas: 5.7 bn scm NGL: 0.4 mill tonnes	
<b>Transport</b>	Oil is piped through the Norpipe system to Teesside in the UK, while gas is piped to Emden in Germany.	
<b>Investment</b>	Total investment is likely to be NOK 175 bn (2003 value). NOK 148 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply base</b>	Phillipsbasen, Tananger	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

## Ekofisk area (incl Ekofisk, Eldfisk, Embla and Tor) cont

### Tor

Blocks and production licences	Block 2/4 - production licence 018. Awarded in 1965. Block 2/5 - production licence 006. Awarded in 1965.	
Progress	Government approval: 1973 On stream in 1978	
Operator	ConocoPhillips Norge	
Licensees (rounded off to two decimal places)	TotalFinaElf Exploration Norge AS	48.20 %
	ConocoPhillips Norge	30.66 %
	Norsk Agip AS	10.82 %
	Norsk Hydro Produksjon a.s	5.81 %
	Petoro AS <sup>1</sup>	3.69 %
	Statoil ASA	0.83 %
Recoverable reserves	Originally present:	Remaining at 31.12.02:
	26.0 mill scm oil	4.4 mill scm oil
	11.5 bn scm gas	0.9 bn scm gas
	1.2 mill tonnes NGL	0.1 mill tonnes NGL
Production	Estimated production in 2003: Oil: 4 300 b/d Gas: 0.05 bn scm NGL: 0.005 mill tonnes	
Transport	Oil is piped through the Norpipe system to Teesside in the UK, while gas is piped to Emden in Germany.	
Investment	Total investment is likely to be NOK 8.8 bn (2003 value). NOK 8.4 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Phillipsbasen, Tananger	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

The Ekofisk area comprises the Ekofisk, Eldfisk, Embla and Tor fields, which lie in 70-75 metres of water. In addition come Albuskjell, Cod, Edda and West Ekofisk, which have ceased production.

This area has been developed in five phases. Ekofisk and its central processing facilities were developed in two stages, with production starting in 1971. Cod and West Ekofisk represented phase three. Oil was initially loaded into tankers on the fields, but has been piped since 1975 through the Norpipe line to Teesside in the UK. Pipeline transport of gas through Norpipe to Emden in Germany began in 1977.

Approved by the authorities in 1975, the fourth development phase covered Albuskjell, Eldfisk and Edda. The last of these came on stream in 1979. The fifth phase was prompted by a desire to improve recovery from Ekofisk, and the 2/4-K water injection platform began operation in December 1987. Expanded several times, water injection capacity on the field is currently just under one mill b/d.

The Edda platform was modified in 1988 to receive gas from the Tommeliten field. A decision to develop the Embla field south of Ekofisk was taken in 1990, with production starting in 1993.

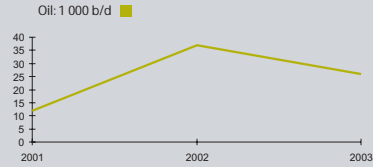
A new plan for development and operation of the Ekofisk field (Ekofisk II) received approval in 1994, when the licence for the Ekofisk area was extended to 2028. A new Ekofisk field centre comprising two platforms has been installed on the field. The 2/4-X wellhead platform was put in place during the autumn of 1996, followed by the 2/4-J processing and transport installation in August 1997. Ekofisk II came on stream in August 1998, and is expected to produce for the next 30 years.

The Ekofisk, Eldfisk, Embla and Tor fields are tied back to the new field centre, and will thereby remain on stream. Ordinary production from Cod, Edda, Albuskjell and West Ekofisk has ceased.

A total of 29 platforms are installed in the Ekofisk area. In connection with the development of the new field centre, many of these installations have already been shut in. On the basis of the cessation plan for Ekofisk I submitted to the authorities in the autumn of 1999, it was resolved in December 2001 to remove 14 steel structures and the topside on the concrete Ekofisk tank to land for recycling of their materials. The bulk of this removal work is due to be completed by 2013.

The plan for development and operation of Eldfisk water injection was approved in 1997. It involves a new platform, 2/7-E, with equipment for water injection, gas lift and gas injection on the Eldfisk field, tied back to one of the existing installations by a bridge. The development was completed in 2000.

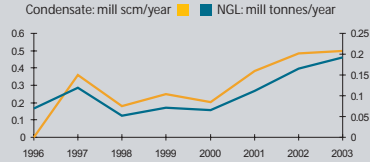
Declining pressure in Ekofisk has caused seabed subsidence, and operator ConocoPhillips initiated efforts in 1985 to safeguard the platforms against this effect. Six of nine steel platforms in the Ekofisk centre were therefore jacked up by six metres in 1987, and a protective concrete wall was installed around the Ekofisk tank in 1989. Seabed subsidence has slowed substantially after waterflooding stabilised the pressure. Since production started in 1971, the seabed has subsided by about seven metres. The new platforms, which came on stream in 1998, have been designed to cope with up to 20 metres of seabed subsidence.



## Glitne

Blocks and production licences	Block 15/5 - production licence 048B. Awarded 1977, carve-out 2001. Block 15/6 - production licence 029B. Awarded 1977, carve-out 2001.	
Progress	Government approval: September 2000. Production start-up: 29 August 2001.	
Operator	Statoil ASA	
Licensees	Statoil ASA	58.9 %
	TotalFinaElf Exploration Norge AS	21.8 %
	Det Norske Oljeselskap AS	10.0 %
	Dong Norge AS	9.3 %
Recoverable reserves	Originally present:	Remaining at 31.12.02:
	5.9 mill scm oil	3.0 mill scm oil
Production	Forecast production in 2001: Oil: 26 000 b/d	
Investment	Total investment is likely to be NOK 1.2 mill (2003 value) NOK 0.9 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Dusavik	

Glitne was proven in 1995 and lies in 110 metres of water 40 km north-west of the Sleipner area. Its development solution is based on leasing the *Petrojarl 1* production ship, which is tied to four production wells and a water injector. Oil from Glitne is processed and stored on the vessel before being transferred to shuttle tankers. Associated gas is used for fuel or gas lift, with surplus gas being injected back below ground.

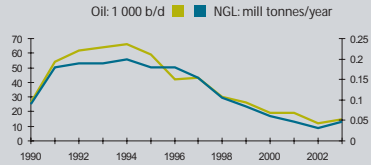


## Gungne

Block and production licence	Block 15/9 - production licence 046. Awarded 1976.	
Progress	Government approval: August 1995 Production start-up: April 1996	
Operator	Statoil ASA	
Licenseses	Statoil ASA	52.6%
	Esso Expl & Prod Norway AS	28.0%
	TotalFinaElf Exploration Norge AS	10.0%
	Norsk Hydro Produksjon a.s	9.4%
Recoverable reserves	Originally present: 9.9 bn scm gas 1.3 mill tonnes NGL 3.1 mill scm condensate	Remaining at 31.12.02: 9.9 bn scm gas 0.6 mill tonnes NGL 1.0 mill scm condensate
Production	Estimated production in 2003: Gas: 1.17 bn scm NGL: 0.19 mill tonnes Condensate: 0.50 mill scm	
Investment	Total investment is likely to be NOK 1.3 bn (2003 value). NOK 1 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Dusavik	

Proven in 1982, Gungne is a satellite of Sleipner East and lies in 83 metres of water. It came on stream in April 1996 through a well drilled from Sleipner A. An additional well to the field was completed in 2001.

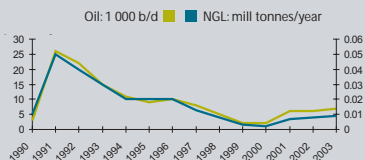




## Gyda (incl Gyda South)

Block and production licence	Block 2/1 - production licence 019B. Awarded 1977. Block 1/3 - production licence 065. Awarded 1981.	
Progress	Government approval: June 1987 Production start-up: June 1990	
Operator	BP Norge AS	
Licensees	BP Norge AS	61%
	Dong Norge AS	34%
	Norske AEDC A/S	5%
Recoverable reserves	Originally present: 34.0 mill scm oil 5.8 bn scm gas 1.8 mill tonnes NGL	Remaining at 31.12.02: 3.0 mill scm oil 0.5 bn scm gas 0.1 mill tonnes NGL
Production	Estimated production in 2003: Oil: 15 000 b/d NGL: 0.04 mill tonnes	
Investment	Total investment is likely to be NOK 14.6 bn (2003 value). NOK 13.7 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Sola	

The Gyda field was proven in 1980, and has been developed with an integrated steel platform in 66 metres of water. Oil is piped to a tie-in with the Ula pipeline and on via the Ekofisk Centre to Teesside, while gas goes through a dedicated pipeline to the Ekofisk Centre for sale to the Ekofisk group. Government approval to develop the small Gyda South satellite was given in 1993. This field is being drained with two extended-reach wells drilled from the Gyda platform. Gyda South came on stream in 1995.



## Hod

Block and production licence	Block 2/11 - production licence 033. Awarded 1969.	
Progress	Government approval: June 1988 Production start-up: September 1990	
Operator	BP Norge AS	
Licensees	Amerada Hess Norge AS	25%
	BP Norge AS	25%
	Enterprise Oil Norge AS	25%
	TotalFinaElf Exploration Norge AS	25%
Recoverable reserves	Originally present: 8.3 mill scm oil 1.6 bn scm gas 0.2 mill tonnes NGL	Remaining at 31.12.02: 1.0 mill scm oil 0.3 bn scm gas
Production	Estimated production in 2003: Oil: 7 000 b/d NGL: 0.009 mill tonnes	
Investment	Total investment is likely to be NOK 2.2 bn (2003 value) NOK 2.1 bn (2003 value) had been invested at 31.12.02	
Operating organisation	Stavanger	
Main supply base	Phillipsbasen/Akerbasen, Tananger	

Hod has been developed with a single unstaffed wellhead platform in 72 metres of water, remotely controlled from the Valhall field 13 km further north. Oil and gas are separated and metered on the Hod platform, and piped as a two-phase flow for final processing on Valhall.

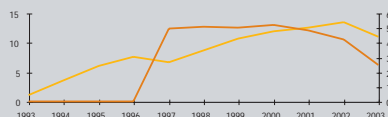
## Sigyn

Block and production licence	Block 16/7 - production licence 072. Awarded 1981.	
Progress	Government approval: August 2001 Production start-up: December 2002	
Operator	Esso Expl & Prod Norway AS	
Licensees	Statoil ASA	50%
	Esso Expl & Prod Norway AS	40%
	Norsk Hydro Produksjon a.s	10%
Recoverable reserves	Originally present:	Remaining at 31.12.02:
	5.1 bn scm gas	5.1 bn scm gas
	1.5 mill tonnes NGL	1.5 mill tonnes NGL
	3.0 mill scm condensate	3.0 mill scm condensate
Production	Estimated production in 2003: Gas: 1.1 bn scm NGL: 0.4 mill tonnes Condensate: 0.9 mill scm	
Investment	Total investment is likely to be NOK 3.2 bn (2003 value) NOK 2.1 bn (2003 value) had been invested at 31.12.02	
Operating organisation	Stavanger	
Main supply base	Dusavik	

Sigyn was proven in 1982 and lies in roughly 70 metres of water in the Sleipner area. The field is tied back to Sleipner A. After processing on that platform, Sigyn gas is exported via the Sleipner dry gas system. Its condensate travels in the existing pipeline from Sleipner to Kårstø.



Produktion, Sleipner East/West  
Gas: bn scm/year ■ Condensate: mill scm/year



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## Sleipner West

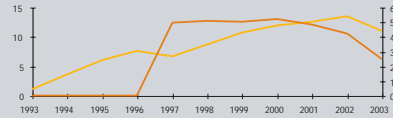
<b>Block and production licence</b>	Block 15/6 - production licence 029. Awarded 1969. Blocks 15/8, 15/9 - production licence 046. Awarded 1976.	
<b>Progress</b>	Government approval: December 1992 Production start-up: August 1996	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> <small>(rounded off to two decimal places)</small>	Statoil ASA	49.50%
	Esso Expl & Prod Norway AS	32.24%
	TotalFinaElf Exploration Norge AS	9.41%
	Norsk Hydro Produksjon a.s	8.85%
<b>Recoverable reserves</b>	Originally present: 104.2 bn scm gas 8.1 mill tonnes NGL 28.1 mill scm condensate	Remaining at 31.12.02 <sup>1</sup> : 84.9 bn scm gas 5.8 mill tonnes NGL 10.0 mill scm condensate
<b>Production</b>	Estimated production in 2003: Gas: 9.84 bn scm NGL: 0.6 mill tonnes Condensate: 1.68 mill scm	
<b>Investment</b>	Total investment is likely to be NOK 24.5 bn (2003 value). NOK 19.7 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply base</b>	Dusavik	

<sup>1</sup> Combined for Sleipner West and East.

Sleipner West was proven in 1974 and lies in 110 metres of water. It has been tied back to Sleipner East, and shares the same operations organisation. Sleipner West is produced through two installations: the Sleipner B wellhead platform and the Sleipner T gas treatment facility. Unprocessed well-streams from Sleipner B are piped the 12 kilometres to Sleipner T, which is linked by a bridge to Sleipner A on the Sleipner East field. Carbon dioxide is removed from the wellstream on the T platform and injected into a sub-surface formation. The gas is piped to continental Europe while its condensate is landed at Kårstø. Plans call for precompression to start on Sleipner T in the autumn of 2004.



Produktion, Sleipner East/West  
Gas: bn scm/year ■ Condensate: mill scm/year

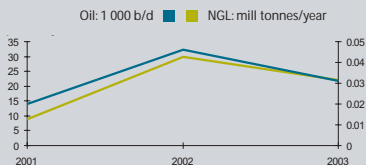


## Sleipner East

Block and production licence	Block 15/9 - production licence 046. Awarded 1976.	
Progress	Government approval: December 1986 Production start-up: August 1993	
Operator	Statoil ASA	
Licensees	Statoil ASA	49.6 %
	Esso Expl & Prod Norway AS	30.4 %
	Norsk Hydro Produksjon a.s	10.0 %
	TotalFinaElf Exploration Norge AS	10.0 %
Recoverable reserves	Originally present: 58.0 bn scm gas 11.3 mill tonnes NGL 25.2 mill scm condensate	Remaining at 31.12.021: 84.9 bn scm gas 5.8 mill tonnes NGL 10.0 mill scm condensate
Production	Estimated production in 2003: Gas: 1.18 bn scm NGL: 0.37 mill tonnes Condensate: 0.8 mill scm	
Investment	Total investment is likely to be NOK 36.1 bn (2003 value). NOK 34.6 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Dusavik	

<sup>1</sup> Combined for Sleipner West and East.

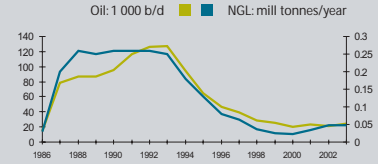
Sleipner East was discovered in 1981 and lies in 82 metres of water. It has been developed with the integrated Sleipner A production, drilling and quarters platform, two templates for subsea wells, a riser platform and a flare stack. The gas is piped to continental Europe while its condensate is landed at Kårstø. The Loke satellite has been developed with a single subsea well tied back to Sleipner A. After the Ty formation had been drained in 1997, the well was extended to the Hugin/Skagerrak formation and brought back on stream in 1998. Sigyn has been developed with full wellstream transfer to Sleipner A and began production in 2002.



## Tambar

Blocks and production licences	Block 1/3 - production licence 065. Awarded 1981. Block 2/1 - production licence 019B. Awarded 1977.	
Progress	Government approval: April 2000 Production start-up: July 2001	
Operator	BP Norge AS	
Licensees	BP Norge AS	55%
	Dong Norge AS	45%
Recoverable reserves	Originally present: 7.0 mill scm oil 2.3 bn scm gas 0.2 mill tonnes NGL	Remaining at 31.12.02: 4.8 mill scm oil 2.3 bn scm gas 0.1 mill tonnes NGL
Production	Forecast production in 2002: Oil: 21 500 b/d NGL: 0.03 mill tonnes	
Investment	Total investment is likely to be NOK 1.5 bn (2003 value). NOK 1.5 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Sola	

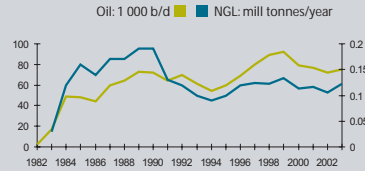
Tambar was proven in 1982 and lies in 68 metres of water, about 16 km south-east of Ula and roughly 12 km north-west of Gyda. The field has been developed with an unstaffed wellhead platform tied back to Ula. Its production is exported to Ula for processing and onward transport by pipeline via Ekofisk to Teesside in the UK. Gas from Tambar is being injected into Ula to help improve recovery from this field.



## Ula

Block and production licence	Block 7/12 - production licence 019. Awarded 1965.	
Progress	Government approval: May 1980 Production start-up: October 1986	
Operator	BP Norge AS	
Licensees	BP Norge AS	80%
	Svenska Petroleum Exploration A/S	15%
	Dong Norge AS	5%
Recoverable reserves	Originally present:	Remaining at 31.12.02:
	79.2 mill scm oil	15.6 mill scm oil
	4.0 bn scm gas	0.2 bn scm gas
	2.7 mill tonnes NGL	0.2 mill tonnes NGL
Production	Estimated production in 2003: Oil: 24 000 b/d NGL: 0.047 mill tonnes	
Investment	Total investment is likely to be NOK 23.9 bn (2003 value). NOK 19.4 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Sola	

Proven in 1976, Ula lies in about 70 metres of water and has been developed with three conventional steel platforms – for processing, drilling and quarters respectively. Oil is carried by the Ula pipeline to Ekofisk and on through Norpipe to Teesside.

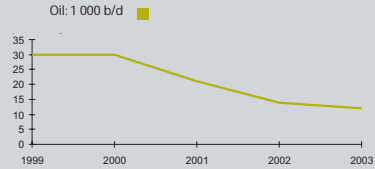


## Valhall (incl Valhall flanks and Valhall water injection)

<b>Blocks and production licences</b>	Block 2/8 - production licence 006B. Awarded 1965, carve-out 2000. Block 2/11 - production licence 033B. Awarded 1969, carve-out 2001.	
<b>Progress</b>	Government approval: June 1977 Government approval: September 2000 (Valhall water injection) Government approval: November 2001 (Valhall flanks) Production start-up: October 1982	
<b>Operator</b>	BP Norge AS	
<b>Licensees</b> <small>(rounded off to two decimal places)</small>	BP Norge AS	28.09%
	Amerada Hess Norge AS	28.09%
	Enterprise Oil Norge AS	28.09%
	TotalFinaElf Exploration Norge AS	15.72%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	166.9 mill scm oil	92.0 mill scm oil
	30.3 bn scm gas	15.2 bn scm gas
	4.2 mill tonnes NGL	1.7 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 75 000 b/d NGL: 0.12 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 47.7 bn (2003 value) NOK 36.2 bn (2003 value) had been invested at 31.12.02	
<b>Operating organisation</b>	Stavanger	
<b>Main supply base</b>	Phillipsbasen/Akerbasen, Tananger	

Valhall has been developed in 70 metres of water with platforms for drilling, production/compression and quarters. Two 20-inch pipelines, for oil and gas respectively, link Valhall to the Ekofisk centre. In connection with the Ekofisk II development, a new 24-km gas line from Valhall ties directly into the Norpipe gas trunkline to Emden. Oil is piped via Ekofisk to Teesside. The Valhall flanks and Valhall water injection developments are expected to improve the recovery factor for the field to 42 per cent. Valhall flanks is being developed with two unstaffed platforms. Production from the south flank is due to start in the first quarter of 2003. A platform connected by a bridge to the existing installations is due to be installed in the summer of 2003 for Valhall water injection, which will come on stream later the same year.



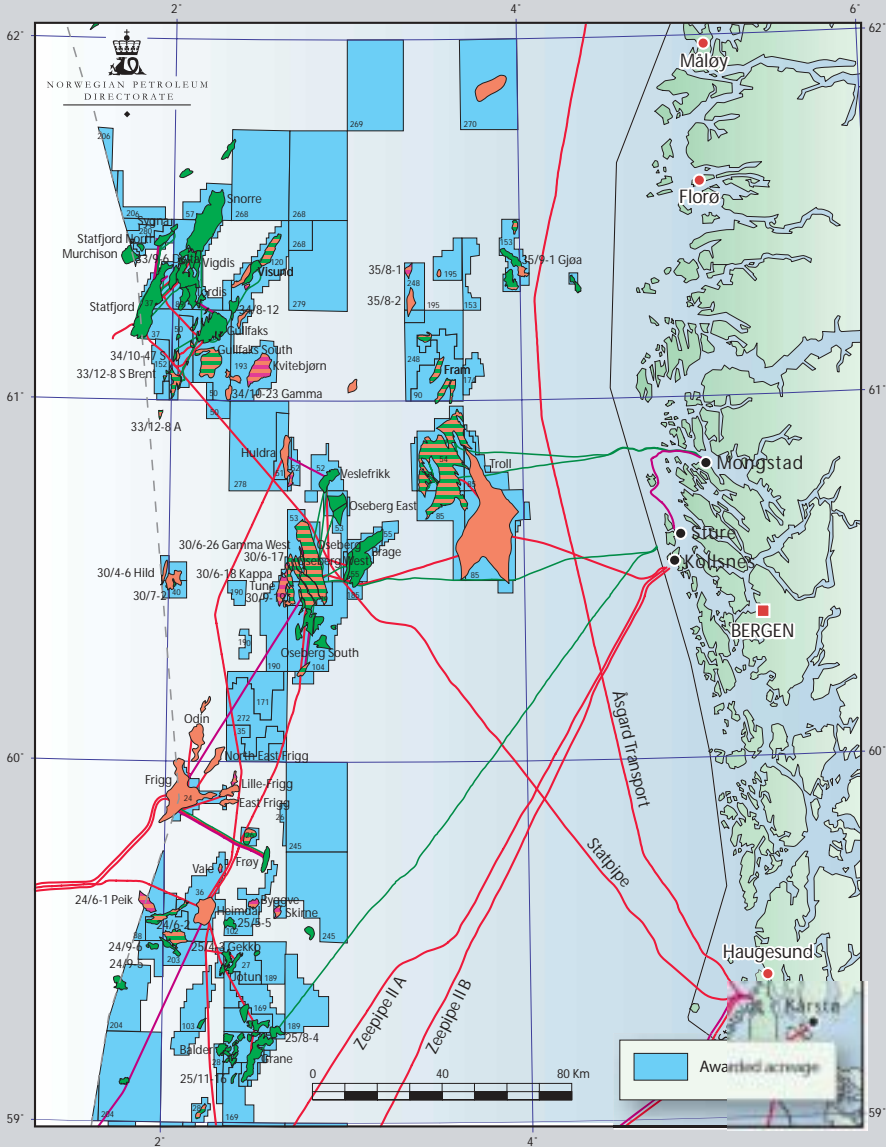


## Varg

Block and production licence	Block 15/12 - production licence 038. Awarded 1975.	
Progress	Government approval: May 1996 Production start-up: December 1998	
Operator	Pertra AS	
Licensees	Pertra AS	70%
	Petoro AS <sup>1</sup>	30%
Recoverable reserves	Originally present: 6.1 mill scm oil	Remaining at 31.12.02: 0.6 mill scm oil
Production	Estimated production in 2003: Oil: 12 000 b/d	
Investment	Total investment is likely to be NOK 5.5 bn (2003 value). NOK 5.2 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Oslo	
Main supply base	Tananger	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Varg was proven in 1984 and lies in 84 metres of water south of Sleipner East. The field has been developed with a wellhead platform and a production ship which provides integrated oil storage. These two units are linked by flexible flowlines for oil production as well as water and gas injection, and by umbilicals for power supply and control. The wellhead platform is normally unstaffed. Oil is transferred to shuttle tankers from the production ship via a discharging system at the stern of the latter. The production ship was sold in 1999 to Petroleum Geo Services (PGS), which also took over management responsibility for the vessel. The cessation plan for Varg was approved by the King in Council in November 2001, but the exact date for a final shutdown remains to be clarified.



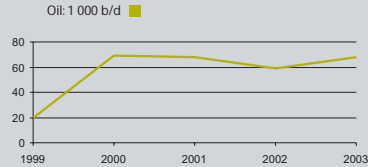
## Northern North Sea sector

The main areas in the northern part of Norway's North Sea sector are Tampen, Troll/Oseberg, and Frigg/Heimdal.

Tampen contains a number of fields, including Statfjord, Snorre, Gullfaks, Visund, Vigdis and Tordis. Several of these rank among Norway's largest oil fields. Although this is a mature petroleum province, its resource potential remains considerable.

Troll has a very important function in gas deliveries from the NCS, but has also become a substantial oil producer. The Oseberg area includes Brage and Veslefrikk as well as Oseberg itself. Oil production from this part of the NCS is declining, but will remain substantial for many years to come. Oseberg is set to increase its gas deliveries.

Heimdal has developed into a gas centre which provides processing services for surrounding fields. Production from Frigg is likely to cease in 2004, after many years of operation.



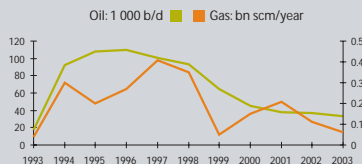
## Balder (incl Ringhorne)

Blocks and production licences	Block 25/11 - production licence 001. Awarded 1965. Block 25/8 - production licence 027. Awarded 1969. Block 25/8 - production licence 027C. Awarded 1969, carve-out 2000. Blocks 25/8 and 25/11 - production licence 169. Awarded 1991.
Progress	Government approval: February 1996 Ringhorne approval: June 2000 Production start-up: October 1999
Operator	Esso Expl & Prod Norway AS
Licensee	Esso Expl & Prod Norway AS <span style="float: right;">100%</span>
Recoverable reserves	Originally present: <span style="float: right;">Remaining at 31.12.02:</span> 60.3 mill scm oil <span style="float: right;">48.0 mill scm oil</span> 2.9 bn scm gas <span style="float: right;">2.9 bn scm gas</span>
Production	Estimated production in 2003: Oil: 68 000 b/d
Investment	Total investment is likely to be NOK 23.1 bn (2003 value). NOK 19 bn (2003 value) had been invested at 31.12.02.
Operating organisation	Stavanger
Main supply base	Dusavik

Balder was proven in 1967 and lies about 85 km north of the Sleipner area and 190 km west of Stavanger. The water depth is roughly 125 metres. Balder has been developed with a production ship tied to subsea-completed wells. Oil is processed and stored on the ship before being transferred to shuttle tankers.

The Storting approved the Ringhorne development in May 2000. Covering several structures close to Balder, it involves an integrated drilling, well and quarters platform with first-stage processing. This has been tied back to the Balder ship for further processing and export of the oil. The platform is supplemented with two subsea wells – for production and water injection respectively – tied back directly to the ship. While the subsea producer came on stream in May 2001, the platform started production in early 2003.

The Ringhorne and Balder pipeline system was approved by the government on 1 February 2003. This project involves three pipelines to transport oil and gas from the two fields to Jotun.

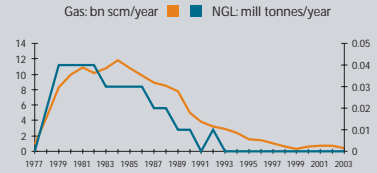


## Brage

<b>Blocks and production licences</b>	Block 30/6 - production licence 053B. Awarded 1979, carve-out 1998. Block 31/4 - production licence 055. Awarded 1979. Block 31/7 - production licence 185. Awarded 1991.	
<b>Progress</b>	Government approval: March 1990 Production start-up: September 1993	
<b>Operator</b>	Norsk Hydro Produksjon a.s	
<b>Licensees</b> <small>(rounded off to two decimal places)</small>	Norsk Hydro Produksjon a.s	20.00%
	Paladin Resources Norge AS	20.00%
	Esso Expl & Prod Norway AS	16.34%
	Petoro AS <sup>1</sup>	14.26%
	Statoil ASA	12.70%
	Fortum Petroleum AS	12.26%
	OER Oil AS	4.44%
<b>Recoverable reserves</b>	Originally present: 45.4 mill scm oil 2.0 bn scm gas 0.7 mill tonnes NGL	Remaining at 31.12.02: 4.1 mill scm oil 0.1 bn scm gas 0.1 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 33 000 b/d Gas: 0.06 bn scm NGL: 0.03 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 17.5 bn (2003 value). NOK 16.7 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Bergen	
<b>Main supply base</b>	Mongstad	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

The Brage field has been developed in 140 metres of water with an integrated steel production, drilling and quarters platform. Production began in 1993 and went off plateau in 1998. Oil goes by pipeline to Oseberg A for onward transmission through the Oseberg Transport System (OTS) to the Sture terminal near Bergen, while gas is carried in a line tied to Statpipe for onward transport. A plan for development and operation of the Sogne Fjord formation was approved in October 1998. One well in this formation is currently producing, and several more are under consideration.



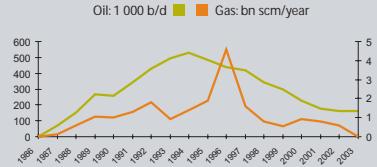
## Frigg

<b>Block and production licences</b>	Blocks 25/1 - production licence 024. Awarded 1969. 60.82 per cent lies on the Norwegian side, 39.18 per cent in the UK sector.	
<b>Progress</b>	Government approval: June 1974 Production start-up: September 1977	
<b>Operator</b>	TotalFinaElf Exploration Norge AS	
<b>Licensees</b> (rounded off to two decimal places)	TotalFinaElf Exploration Norge AS	28.67%
	Elf Exploration UK plc	26.12%
	Norsk Hydro Produksjon a.s	19.99%
	Total Oil Marine plc	13.06%
	Statoil ASA	12.16%
<b>Recoverable reserves</b>	Originally present: 115.9 bn scm gas 0.5 mill scm condensate	Remaining at 31.12.02: 1.3 bn scm gas
<b>Production</b>	Estimated production in 2003: Gas: 0.4 bn scm. Condensate: 2 000 scm Production is expected to cease in 2004.	
<b>Investment</b>	Total investment is likely to be NOK 36 bn (2003 value). NOK 36 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply base</b>	Dusavik	

The unitisation agreed by the Frigg partners, which gives Norway a 60.82 per cent share, was approved by the UK and Norwegian authorities under a treaty between the two countries on joint exploitation. Production started in 1977 and reached plateau in October 1979. Frigg went off plateau in October 1987.

Located in about 100 metres of water, the field installations also processed Frøy's oil and gas from the summer of 1995 until the latter field ceased production in March 2001.

In addition, Britain's Alwyn field utilises the Frigg installations, while gas from North-East Frigg, Odin, East Frigg and Lille-Frigg was processed there until production from these fields ceased in May 1993, August 1994, December 1997 and March 1999 respectively. The government decided not to acquire the North-East Frigg, East Frigg, Odin and Lille-Frigg installations. A cessation plan for Frigg was submitted to the authorities in November 2001.



## Gullfaks (incl Gullfaks West)

Blocks and production licences	Block 34/10 - production licence 050. Awarded 1978. Block 34/10 - production licence 050B. Awarded 1995.	
Progress	Government approval: October 1981 (Gullfaks phase I – platforms A and B). Production start-up: December 1986	
Operator	Statoil ASA	
Licensees	Statoil ASA	61%
	Petoro AS <sup>1</sup>	30%
	Norsk Hydro Produksjon a.s	9%
Recoverable reserves	Originally present: 335.3 mill scm oil 22.3 bn scm gas 2 mill tonnes NGL	Remaining at 31.12.02: 40.2 mill scm oil 2.2 bn scm gas 0.5 mill tonnes NGL
Production	Estimated production in 2003: Oil: 159 000 b/d	
Investment	Total investment is likely to be NOK 112.1 bn (2003 value). NOK 103.8 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Bergen	
Main supply bases	Coast Center Base, Sotra og Florø	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Gullfaks was discovered in 1978 and lies in 130-220 metres of water. The field has been developed with three concrete gravity based platforms. Gullfaks A and C are integrated production, drilling and quarters units, while oil and gas from Gullfaks B are piped to the A or C installations for further treatment and storage.

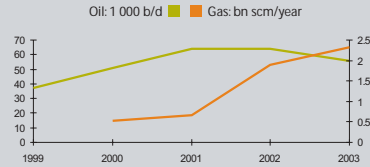
Stabilised oil is stored in the A and C platforms and loaded into tankers via buoys. Gas is being injected back into Gullfaks from 2002.

The Gullfaks installations form an important part of the infrastructure in the Tampen area. The well-stream from Tordis is transferred to and processed on Gullfaks C, while stabilised crude from Vigdis and Visund is stored on and shipped from the A platform.

Development approval for the small Gullfaks West satellite was given by the King in Council in January 1993. This field is being drained by a horizontal well drilled from Gullfaks B. Draining Gullfaks Lunde through wells drilled from Gullfaks C was approved in November 1995, and this field came on stream in 1996.

In recent years, Gullfaks A and C have been modified to receive and process oil and gas from Gullfaks South. This satellite has been developed with subsea wells remotely operated from the A platform (see the next section).





## Gullfaks South (incl Rimfaks and Gullveig)

Blocks and production licences	Block 34/10 - production licence 050. Awarded 1978. Block 34/10 - production licence 050B. Awarded 1995. Block 33/12 - production licence 037B. Awarded 1973, carve-out 1998.
Progress	Government approval (phase I): March 1996 Government approval (phase II): June 1998 Production start-up (phase I): October 1998 Production start-up (phase II): October 2001
Operator	Statoil ASA
Licensees	Statoil ASA 61% Petoro AS <sup>1</sup> 30% Norsk Hydro Produksjon a.s 9%
Recoverable reserves	Originally present: Remaining at 31.12.02: 35.5 mill scm oil 22.6 mill scm oil 32.1 bn scm gas 29.1 bn scm gas 4.0 mill tonnes NGL 3.8 mill tonnes NGL
Production	Estimated production in 2003: Oil: 56 000 b/d Gas: 2.32 bn scm NGL 0.27 mill tonnes
Investment	Total investment is likely to be NOK 29.3 bn (2003 value). NOK 20.9 bn (2003 value) had been invested at 31.12.02.
Operating organisation	Bergen
Main supply bases	Coast Center Base, Sotra og Florø

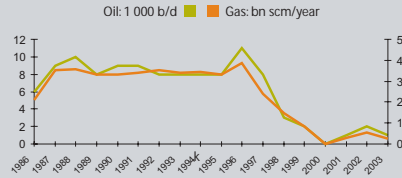
<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Gullfaks South, which also includes the separate Rimfaks and Gullveig structures, is a satellite to Gullfaks and lies in the same water depth. The licensees have pursued a phased development of Gullfaks South.

Gullfaks South phase I embraces the production of oil and condensate. Associated gas is injected back into the reservoirs. This phase comprises eight subsea installations tied back to Gullfaks A for processing, storage and loading of oil and condensate.

Phase II embraces production and export of the gas resources and associated liquids. The development solution is based on subsea installations tied back to Gullfaks A and C. Gas production from Gullfaks South began in the autumn of 2001. After processing, rich gas is transported to Kårstø via a pipeline which ties into Statpipe. After removal of the NGL, dry gas is piped on to continental Europe. Oil and condensate are stabilised, stored and loaded by existing facilities on the platforms.

In connection with phase II, Gullfaks C has been upgraded to expand its gas processing and export capacity. A corresponding upgrade will be implemented on the A platform up to the autumn of 2003.



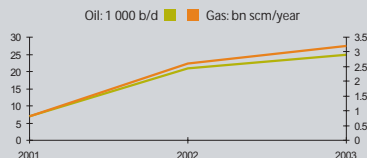
## Heimdal

<b>Block and production licence</b>	Block 25/4 - production licence 036. Awarded 1971.	
<b>Progress</b>	Government approval: June 1981 Production start-up: December 1985	
<b>Operator</b>	Norsk Hydro Produksjon a.s	
<b>Licensees</b> <small>(rounded off to two decimal places)</small>	Marathon Petroleum Norge A/S	23.80%
	Petoro AS <sup>1</sup>	20.00%
	Statoil ASA	20.00%
	Norsk Hydro Produksjon a.s	19.27%
	TotalFinaElf Exploration Norge AS	16.76%
	AS Uglund Rederi	0.17%
<b>Recoverable reserves</b>	Originally present: 7.0 mill scm oil 41.8 bn scm gas	Remaining at 31.12.02: 0.8 mill scm oil 0.2 bn scm gas
<b>Production</b>	Estimated production in 2003: Oil: 1 000 b/d Gas: 0.25 bn scm Production is expected to cease in 2003. Heimdal will continue providing processing and transport services as a gas centre to 2010 and beyond.	
<b>Investment</b>	Total investment is likely to be NOK 19.5 bn (2003 value). NOK 19.5 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Bergen	
<b>Main supply base</b>	Dusavik	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

The field was declared commercial in 1974, and the government exercised its option to secure participation in 1982. Heimdal has been developed with an integrated steel platform in 120 metres of water.

In 1998, the MPE received development plans for the Heimdal gas centre, which involved installing a new riser platform as well as modifying and upgrading the existing installation. The MPE approved the plan for development and operation of the Heimdal gas centre in February 1999, and the project came on stream in 2000. It ensures long-term operation of the Heimdal platform by using its capacity to process gas from Huldra and other surrounding fields.



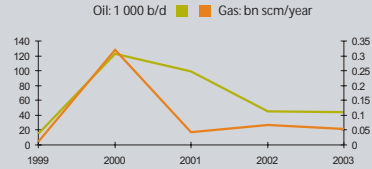
# 12

## Huldra

<b>Blocks and production licences</b>	Block 30/2 - production licence 051. Awarded 1979. Block 30/3 - production licence 052B. Awarded 2001.	
<b>Progress</b>	Government approval: February 1999 Production start-up: November 2001	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> (rounded off to two decimal places)	Petoro AS <sup>1</sup>	31.96%
	TotalFinaElf Exploration Norge AS	24.33%
	Norske Conoco A/S	23.34%
	Statoil ASA	19.66%
	Paladin Resources Norge AS	0.50%
	Svenska Petroleum Exploration A/S	0.21%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	5 mill scm oil	3.7 mill scm oil
	12.9 bn scm gas	10.2 bn scm gas
	0.1 mill tonnes NGL	0.1 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 25 000 b/d Gas: 3.2 bn scm NGL: 0.027 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 6.9 bn (2003 value) NOK 6.8 bn (2003 value) had been invested at 31.12.02.	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Huldra was proven in 1982 and lies in 125 metres of water. It has been developed with a normally unstaffed wellhead platform remotely operated from Veslefrikk 16 km away. Condensate is piped to Veslefrikk B for processing and onward transport to the crude oil terminal at Sture through the Oseberg Transport System (OTS). The rich gas is piped 145 km to the Heimdal field for processing and export to customers via either the Statpipe/Norpipe system to continental Europe or the Vesterled line to the UK.



## Jotun

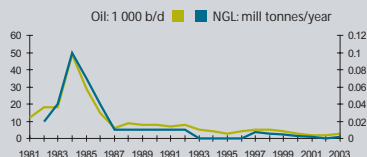
Blocks and production licences	Block 25/8 - production licence 027B. Awarded 1969, carve-out 1999. Block 25/7 - production licence 103B. Awarded 1985, carve-out 1998.	
Progress	Government approval: June 1997 Production start-up: October 1999	
Operator	Esso Expl & Prod Norway AS	
Licensees	Esso Expl & Prod Norway AS	45%
	Enterprise Oil Norge AS	45%
	Det Norske Oljeselskap AS	7%
	Petoro AS <sup>1</sup>	3%
Recoverable reserves	Originally present: 29.3 mill scm oil 0.7 bn scm gas	Remaining at 31.12.02: 13.2 mill scm oil 0.1 bn scm gas
Production	Estimated production in 2003: Oil: 44 000 b/d Gas: 0.05 bn scm	
Investment	Total investment is likely to be NOK 11.1 bn (2003 value). NOK 10.1 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Stavanger	
Main supply base	Dusavik	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Jotun comprises the Elli, Elli South and Tau West reservoirs, proven in 1994 and 1995. The field lies about 25 km north of Balder and 165 km west of Haugesund, in 126 metres of water. It has been developed with a floating production, storage and offloading (FPSO) unit and a wellhead platform. Ship and platform are tied together by flowlines for oil and gas production and for water injection, as well as power and control cables.

The wellhead platform is normally unstaffed. Oil production is transported by shuttle tankers. Gas will be exported through a pipeline tied into the Statpipe system.

From 2004, Jotun will also receive oil and gas from Balder and Ringhorne for processing and onward transport.



## Murchison

<b>Block and production licence</b>	Block 33/9 - production licence 037C. Awarded 2000. The Norwegian share is 22.2 per cent, while the British share is 77.8 per cent.	
<b>Progress</b>	Production start-up: September 1980	
<b>Operator</b>	CNR International (UK) Limited	
<b>Licensees</b> (rounded off to two decimal places)	CNR International (UK) Limited	68.72%
	Statoil ASA	11.52%
	Ranger Oil (UK) Limited	9.08%
	Norske Conoco A/S	2.68%
	Esso Expl & Prod Norway AS	5.50%
	A/S Norske Shell	2.22%
	Enterprise Oil Norge AS	0.23%
<b>Recoverable reserves</b> (Norwegian share)	Originally present: 14.2 mill scm oil 0.4 bn scm gas 0.4 mill tonnes NGL	Remaining at 31.12.02: 1.1 mill scm oil 0.1 bn scm gas 0.1 mill tonnes NGL
<b>Production</b> (Norwegian share)	Estimated production in 2003: Oil: 3 000 b/d NGL: 2 000 tonnes	
<b>Investment</b>	The Norwegian share of total investment is likely to be NOK 7.6 bn (2003 value). NOK 7.4 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Aberdeen, Scotland	
<b>Main supply base</b>	Peterhead, Scotland	

An integrated steel production, drilling and quarters platform has been installed on Murchison, which was discovered in August 1975. A unitisation agreement for Murchison was concluded by its British and Norwegian licensees in 1979. Both Norwegian and UK shares of the oil and NGL are landed through the Brent system to Sullom Voe in Shetland, with the gas piped to St Fergus on the Scottish mainland. CNR International (UK) took over as operator in 2002 from Kerr McGee North Sea (UK) Ltd.



Oil: 1 000 b/d ■ Gas: bn scm/year



## Oseberg (incl Oseberg West, Oseberg East and Oseberg South)

<b>Blocks and production licences</b>	Block 30/6 - production licence 053. Awarded 1979. Block 30/9 - production licence 079, awarded 1982, and production licence 104, awarded 1985. Block 30/12 - production licence 171 B. Awarded 2000
<b>Progress</b>	Government approval: June 1984 Oseberg West approval: December 1988 Oseberg East approval: October 1996 Oseberg South approval: June 1997 Production start-up: December 1988
<b>Operator</b>	Norsk Hydro Produksjon a.s
<b>Licensees</b> (rounded off to two decimal places)	Norsk Hydro Produksjon a.s 34.0% Petoro AS <sup>1</sup> 33.6% Statoil ASA 15.3% TotalFinaElf Exploration Norge AS 10.0% Mobil Development Norway A/S 4.7% Norske Conoco A/S 2.4%
<b>Recoverable reserves</b>	Originally present: 432.1 mill scm oil 103.8 bn scm gas Remaining at 31.12.02: 108.4 mill scm oil 95.2 bn scm gas
<b>Production</b>	Estimated production in 2003: Oil: 279 000 b/d Gas: 2.9 bn scm
<b>Investment</b>	Total investment is likely to be NOK 103.7 bn (2003 value). NOK 91.1 bn (2003 value) had been invested at 31.12.02.
<b>Operating organisation</b>	Bergen
<b>Main supply base</b>	Mongstad

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.



In connection with the sale of SDFI assets in 2002, licence interests were harmonised in the Oseberg area – the Oseberg Unit (Oseberg, Oseberg West and Oseberg East) and the Oseberg South Unit. This harmonisation was intended to ensure more effective overall development of the area across the underlying production licence boundaries.

Most of the reserves in the Oseberg area belonged to the original Oseberg Unit. After many years of production, this field now has oil reserves corresponding roughly to those in Oseberg South. But it continues to hold the great bulk of gas reserves in the area.

The original field is expected to account for almost a third of production from the Oseberg area in 2003.

The first development phase for Oseberg comprised a two-platform field centre. Oseberg A is a production and quarters platform on a concrete gravity base structure, while Oseberg B is a drilling and injection platform with a steel jacket. The second development phase embraced Oseberg C, a steel production, drilling and quarters platform which stands roughly 14 km north of the field centre. Total processing capacity for Oseberg is about 500 000 barrels of oil per day.

The platforms stand in around 100 metres of water. Reservoir pressure in Oseberg is maintained by gas, water, and water alternating gas (WAG) injection. Injection gas was received by Oseberg from the Togi sub-sea module on Troll until 2002. Gas from the Oseberg West satellite is injected in the phase I area.

Oil from Oseberg as well as Oseberg South, Oseberg East, Brage and Veslefrikk is piped through the Oseberg Transport System (OTS) to Sture near Bergen.

Oseberg D, a steel platform with gas processing and export facilities, was tied to the field centre by a bridge in the spring of 1999. Gas deliveries to continental Europe began from Oseberg in October 2000 through a new pipeline which ties into the Statpipe system at Heimdal. Gas and condensate from the Tune field is piped to the field centre. After removal of the condensate, the gas will be injected into Oseberg.

The Oseberg East and Oseberg South satellites are also tied back to the field centre installations for oil and gas processing.

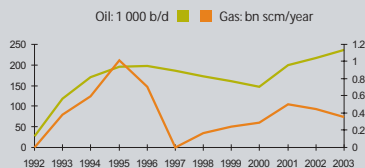
Comprising several structures south of Oseberg, the Oseberg South field was proven during 1984 in about 100 metres of water. Six of its structures are included in the approved development plan. The latter involves



a platform for partial processing of the oil before it is piped to the Oseberg field centre for further processing and transport to land through the Oseberg Transport System (OTS) line. Gas production is injected back underground, and possible export of these reserves will occur in a later phase. The northern part of the field is being produced through wells drilled from the Oseberg field centre.

Oil production from Oseberg South began in February 2000 through a well drilled from the field centre. The platform came on stream in September 2000 and is expected to continue producing until 2028.

Located in 160 metres of water in the north-eastern part of the unitised Oseberg field and south of Veslefrikk, Oseberg East was proven in 1981 and has been developed with a platform for quarters, drilling and first-stage separation of oil, water and gas. Crude is piped to Oseberg A for further processing and onward transport via the Oseberg Transport System (OTS) to Sture near Bergen.



## Snorre (incl Snorre B)

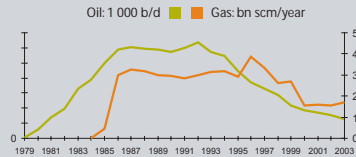
<b>Blocks and production licences</b>	Block 34/4 - production licence 057. Awarded 1979. Block 34/7 - production licence 089. Awarded 1984.	
<b>Progress</b>	Government approval: May 1988 Production start-up: August 1992	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> (rounded off to two decimal places)	Petoro AS <sup>1</sup>	30.00%
	Norsk Hydro Produksjon a.s	17.65%
	Statoil ASA	14.40%
	Esso Expl & Prod Norway AS	11.16%
	Idemitsu Petroleum Norge AS	9.60%
	RWE Dea Norge AS	8.88%
	TotalFinaElf Exploration Norge AS	5.95%
	Amerada Hess Norge AS	1.18%
	Enterprise Oil Norge AS	1.18%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	232.0 mill scm oil	127.8 mill scm oil
	8.8 bn scm gas	4.3 bn scm gas
	6.2 mill tonnes NGL	3.0 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 236 000 b/d Gas: 0.36 bn scm NGL: 0.26 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 67.3 bn (2003 value). NOK 53.6 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply base</b>	Florø	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.



Proven in 1979, Snorre lies east of Statfjord in about 300-350 metres of water. Its southern area has been developed with a tension leg platform and a subsea production system. This part of the field contained about 150 mill scm of Snorre's original recoverable oil reserves.

A plan for development and operation of the northern part of the field (Snorre B) was approved in June 1998. This project involves a semi-submersible drilling and production platform, which came on stream in June 2001. Oil and gas from Snorre are piped to Statfjord for final processing, storage and export.



## Statfjord

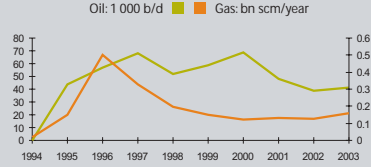
<b>Blocks and production licence</b>	Blocks 33/9 and 33/12 - production licence 037. Awarded 1973. Norway's share of the field is 85.47 per cent, Britain's is 14.53 per cent.	
<b>Progress</b>	Government approval: 1976 Production start-up: November 1979	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> <small>(rounded off to two decimal places)</small>	Statoil ASA	44.34%
	Esso Expl & Prod Norway AS	21.37%
	Norske Conoco A/S	10.33%
	A/S Norske Shell	8.55%
	Conoco (UK) Ltd	4.84%
	Chevron UK Ltd	4.84%
	BP Petroleum Development Ltd	4.84%
	Enterprise Oil Norge AS	0.89%
<b>Recoverable reserves</b> <small>(Norwegian share)</small>	Originally present:	Remaining at 31.12.02:
	561.4 mill scm oil	34.5 mill scm oil
	58.4 bn scm gas	12.0 bn scm gas
	14.4 mill tonnes NGL	3.9 mill tonnes NGL
<b>Production</b> <small>(Norwegian share)</small>	Estimated production in 2003: Oil: 126 000 b/d Gas: 1.71 bn scm NGL: 0.42 mill tonnes	
<b>Investment</b>	The Norwegian share of total investment is likely to be NOK 129.7 bn (2003 value). NOK 110.5 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply bases</b>	Coast Center Base, Sotra and Florø	

Proven in 1974, Statfjord lies in about 145 metres of water and extends into the UK North Sea. It has been developed with three fully-integrated platforms supported by gravity base structures featuring concrete storage cells. These installations have a combined processing capacity of 850 000 barrels per day. Each platform is tied to a buoy for loading stabilised oil into tankers. The platforms came on stream in November 1979, November 1982 and June 1985 respectively.

Gas sales began in October 1985. Norway's share has been sold to a consortium of European buyers and is piped to Emden in Germany via the Statpipe/Norpipe system. The UK share of gas output has been sold to British Gas, and is landed in the UK via the Far North Liquids and Associated Gas System (Flags). Oil transport is organised by K/S Statfjord Transport, in which Statoil has a 50 per cent interest.

A unitisation agreement has been signed between the UK and Norwegian licensees. The operatorship for production licence 037 and the unitised field was transferred from Mobil to Statoil on 1 January 1987.

Oil and gas from Snorre, Sygna, Statfjord East and Statfjord North are processed on and exported from the Statfjord installations.

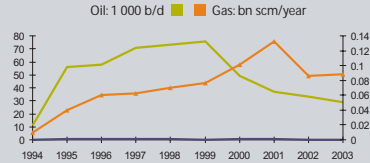


## Statfjord North

<b>Block and production licence</b>	Block 33/9 - production licence 037. Awarded 1973.	
<b>Progress</b>	Government approval: December 1990 Production start-up: January 1995	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> (rounded off to two decimal places)	Petoro AS <sup>1</sup>	30.00%
	Statoil ASA	21.88%
	Esso Expl & Prod Norway AS	25.00%
	Norske Conoco A/S	12.08%
	A/S Norske Shell	10.00%
	Enterprise Oil Norge AS	1.04%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	38.4 mill scm oil	13.1 mill scm oil
	1.9 bn scm gas	0.5 bn scm gas
	0.8 mill tonnes NGL	0.4 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 41 000 b/d Gas: 0.16 bn scm NGL: 0.07 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 8.3 bn (2003 value). NOK 7 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply bases</b>	Coast Center Base, Sotra	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Discovered in 1977, Statfjord North is about 17 km north of Statfjord. It has been developed with sub-sea installations in 250-290 metres of water, tied back to Statfjord C for processing and export.

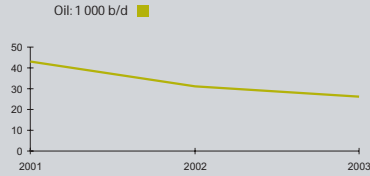


## Statfjord East

<b>Blocks and production licences</b>	Block 33/9 - production licence 037. Awarded 1973. Block 34/7 - production licence 089. Awarded 1984.	
<b>Progress</b>	Government approval: December 1990 Production start-up: September 1994	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> (rounded off to two decimal places)	Petoro AS <sup>1</sup>	30.00%
	Statoil ASA	25.05%
	Esso Expl & Prod Norway AS	17.70%
	Norsk Hydro Produksjon a.s	6.64%
	Norske Conoco A/S	6.04%
	A/S Norske Shell	5.00%
	Idemitsu Petroleum Norge AS	4.80%
	TotalFinaElf Exploration Norge AS	2.80%
	RWE Dea Norge AS	1.40%
	Enterprise Oil Norge AS	0.52%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	35.0 mill scm oil	8.7 mill scm oil
	2.6 bn scm gas	0.6 bn scm gas
	1.1 mill tonnes NGL	0.6 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 29 000 b/d Gas: 0.21 bn scm NGL: 0.88 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 7.7 bn (2003 value). NOK 6.2 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stavanger	
<b>Main supply bases</b>	Coast Center Base, Sotra	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Statfjord East was discovered in 1976 and lies about seven km north-east of Statfjord. It has been developed with subsea installations in 150-190 metres of water, tied back to Statfjord C for processing and export.



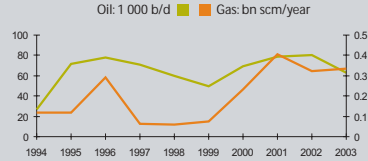
## Syгна

<b>Blocks and production licences</b>	Block 33/9 - production licence 037. Awarded 1973. Block 34/7 - production licence 089. Awarded 1984.	
<b>Progress</b>	Government approval: April 1999 Production start-up: August 2000	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> (rounded off to two decimal places)	Petoro AS <sup>1</sup>	30.00%
	Statoil ASA	24.73%
	Esso Expl & Prod Norway AS	18.48%
	Norske Conoco A/S	6.65%
	Norsk Hydro Produksjon a.s	5.98%
	A/S Norske Shell	5.50%
	Idemitsu Petroleum Norge AS	4.32%
	TotalFinaElf Exploration Norge AS	2.52%
	RWE Dea Norge AS	1.26%
	Enterprise Oil Norge AS	0.57%
<b>Recoverable reserves</b>	Originally present: 11.0 mill scm oil	Remaining at 31.12.02: 6.0 mill scm oil
<b>Production</b>	Estimated production in 2003: Oil: 26 000 b/d	
<b>Investment</b>	Total investment is likely to be NOK 2.5 bn (2003 value). NOK 1.9 bn (2003 value) had been invested at 31.12.02	
<b>Operating organisation</b>	Stavanger	
<b>Main supply base</b>	Florø	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Proven in 1996, this field straddles the boundary between production licences 037 (Statfjord) and 089 (Snorre). Syгна has been developed with a subsea production system tied back to Statfjord C. Water injection capacity to the Statfjord North area was upgraded in 1999 in order to supply Syгна with injection water.





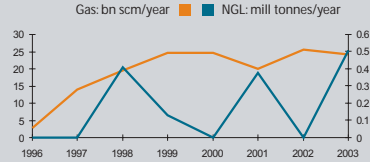
## Tordis (incl Tordis East and Borg)

Block and production licence	Block 34/7 - production licence 089. Awarded 1984.	
Progress	Government approval: May 1991 Production start-up: June 1994	
Operator	Statoil ASA	
Licenseses	Petoro AS <sup>1</sup>	30.00%
	Statoil ASA	28.22%
	Norsk Hydro Produksjon a.s	13.28%
	Esso Expl & Prod Norway AS	10.50%
	Idemitsu Petroleum Norge AS	9.60%
	TotalFinaElf Exploration Norge AS	5.60%
	RWE Dea Norge AS	2.80%
Recoverable reserves	Originally present: 54.5 mill scm oil 4.4 bn scm gas 1.5 mill tonnes NGL	Remaining at 31.12.02: 18.4 mill scm oil 1.6 bn scm gas 0.7 mill tonnes NGL
Production	Estimated production in 2003: Oil: 63 000 b/d Gas: 0.34 bn scm NGL: 0.109 mill tonnes	
Investment	Total investment is likely to be NOK 9.5 bn (2003 value). NOK 8.4 bn (2003 value) had been invested at 31.12.02	
Operating organisation	Stavanger	
Main supply base	Florø	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

The Tordis area embraces Tordis East and Borg as well as Tordis itself. Lying between Snorre and Gullfaks, Tordis was discovered in 1987 and came on stream in July 1994. A subsea development in about 200 metres of water is tied back to Gullfaks C, where the wellstream is processed.

Tordis East, Borg and another structure (STUJ) have been developed with subsea-completed wells tied back to the Tordis production facilities, and came on stream in December 1998, July 1999 and December 2001 respectively.



## Troll phase I

<b>Blocks and production licences</b>	Block 31/2 - production licence 054. Awarded 1979. Blocks 31/3, 31/5 and 31/6 - production licence 085. Awarded 1983. Blocks 31/3 and 31/6 - production licence 085C. Awarded 2002												
<b>Progress</b>	Government approval: December 1986 Production start-up: February 1996												
<b>Operator</b>	A/S Norsk Shell was operator for the development phase. Statoil ASA is operator for the production phase.												
<b>Licensees</b> (rounded off to two decimal places)	<table border="0"> <tr> <td>Petoro AS<sup>1</sup></td> <td style="text-align: right;">56.00%</td> </tr> <tr> <td>Statoil ASA</td> <td style="text-align: right;">20.80%</td> </tr> <tr> <td>Norsk Hydro Produksjon a.s</td> <td style="text-align: right;">9.78%</td> </tr> <tr> <td>A/S Norske Shell</td> <td style="text-align: right;">8.10%</td> </tr> <tr> <td>TotalFinaElf Exploration Norge AS</td> <td style="text-align: right;">3.69%</td> </tr> <tr> <td>Norske Conoco A/S</td> <td style="text-align: right;">1.62%</td> </tr> </table>	Petoro AS <sup>1</sup>	56.00%	Statoil ASA	20.80%	Norsk Hydro Produksjon a.s	9.78%	A/S Norske Shell	8.10%	TotalFinaElf Exploration Norge AS	3.69%	Norske Conoco A/S	1.62%
Petoro AS <sup>1</sup>	56.00%												
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Norske Conoco A/S	1.62%												
<b>Recoverable reserves</b>	<table border="0"> <tr> <td>Originally present:</td> <td style="text-align: right;">Remaining at 31.12.02:</td> </tr> <tr> <td>1 325.7 bn scm gas</td> <td style="text-align: right;">1 188.8 bn scm gas</td> </tr> <tr> <td>31.6 mill tonnes NGL</td> <td style="text-align: right;">31.6 mill tonnes NGL</td> </tr> <tr> <td>1.6 mill scm condensate</td> <td></td> </tr> </table>	Originally present:	Remaining at 31.12.02:	1 325.7 bn scm gas	1 188.8 bn scm gas	31.6 mill tonnes NGL	31.6 mill tonnes NGL	1.6 mill scm condensate					
Originally present:	Remaining at 31.12.02:												
1 325.7 bn scm gas	1 188.8 bn scm gas												
31.6 mill tonnes NGL	31.6 mill tonnes NGL												
1.6 mill scm condensate													
<b>Production</b>	Estimated production in 2003: Gas: 24.3 bn scm NGL: 0.5 mill tonnes												
<b>Investment</b>	Total investment is likely to be NOK 55.3 bn (2003 value). NOK 46.2 bn (2003 value) had been invested at 31.12.02.												
<b>Transport</b>	Gas from Troll is transported from Kollsnes through Zeepipe to Zeebrugge and Statpipe/Norpipe to Emden. The Franpipe line to Dunkerque has also been used since 1998. Condensate is shipped from Mongstad.												
<b>Operating organisation</b>	Bergen												
<b>Main supply base</b>	Ågotnes												

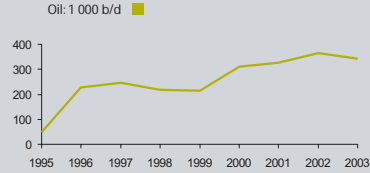
<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Discovered in 1979, Troll lies about 65 km off Kollsnes near Bergen and comprises two main structures: Troll East and Troll West. The first of these primarily occupies blocks 31/3 and 31/6, while most of Troll West is found in block 31/2. Roughly two-thirds of the field's recoverable gas reserves are thought to lie in Troll East.

A staged development has been pursued, with phase I covering gas reserves in the eastern region and phase II focusing on the oil reserves in Troll West. Phase III will cover gas reserves in the latter area.

The original phase I plan, approved in 1986, called for an integrated production, drilling and quarters platform in 330 metres of water, but this was amended in the spring of 1990 to a single wellhead platform and a land-based processing plant at Kollsnes near Bergen. The authorities approved these revised proposals in December 1990.

The processing plant at Kollsnes could be expanded to handle production from a development of the gas reserves in Troll West. Condensate is piped to the Vestprosess facility at Mongstad.



## Troll phase II

<b>Blocks and production licences</b>	Block 31/2 - production licence 054. Awarded 1979. Blocks 31/3, 31/5 and 31/6 - production licence 085. Awarded 1983. Blocks 31/3 and 31/6 - production licence 085C. Awarded 2002	
<b>Progress</b>	Government approval: May 1992 Production start-up: September 1995	
<b>Operator</b>	Norsk Hydro Produksjon a.s	
<b>Licensees</b> (rounded off to two decimal places)	Petoro AS <sup>1</sup>	56.00%
	Statoil ASA	20.80%
	Norsk Hydro Produksjon a.s	9.78%
	A/S Norske Shell	8.10%
	TotalFinaElf Exploration Norge AS	3.69%
	Norske Conoco A/S	1.62%
<b>Recoverable reserves</b>	Originally present: 224.3 mill scm oil Gas reserves are included under Troll phase I.	Remaining at 31.12.02: 106.7 mill scm oil
<b>Production</b>	Estimated production in 2003: Oil: 344 000 b/d.	
<b>Investment</b>	Total investment is likely to be NOK 63.7 bn (2003 value). NOK 58.6 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Bergen	
<b>Main supply base</b>	Mongstad	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

A thin oil layer underlies the whole Troll field, but is only sufficiently thick for commercial recovery in the Troll West region. The latter divides into oil and gas provinces, where the thickness of the oil-bearing zones is 22-27 and 11-14 metres respectively. Test production from the two provinces in 1990 and 1991 yielded positive results.

Crude is being produced from the oil province with horizontally-drilled wells tied back to the Troll B floating production platform. Eighteen of 22 planned production wells are currently in operation, together with one gas injector. The crude is landed through Troll Oil Pipeline I to the terminal at Mongstad near Bergen. Associated gas is exported via the A platform on Troll East.

Oil production from the first Troll B well cluster in the gas province began during November 1995. At 31 December 2001, 29 of 33 planned wells tied back to Troll B were in operation in the gas province.

The floating Troll C production platform came on stream in late October 1999 to recover oil from the northern part of the gas province. At 31 December 2001, 30 of 55 production wells were in operation in addition to a water injector for the Troll Pilot project. Oil from Troll C is landed through Troll Oil Pipeline II to Mongstad, with associated gas exported via Troll A.

Testing of the Troll Pilot, a subsea separation plant, began in the summer of 2000.

## Tune

<b>Blocks and production licences</b>	Block 30/5 - production licence 034. Awarded 1969. Block 30/6 - production licence 053. Awarded 1979. Block 30/8 - production licence 190. Awarded 1993.	
<b>Progress</b>	Government approval: December 1999 Production start-up: 28 November 2002	
<b>Operator</b>	Norsk Hydro Produksjon a.s	
<b>Licensees</b>	Petoro AS <sup>1</sup>	40%
	Norsk Hydro Produksjon a.s	40%
	TotalFinaElf Exploration Norge AS	20%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	6.1 mill scm oil	6.0 mill scm oil
	22.9 bn scm gas	22.9 bn scm gas
	0.1 mill tonnes NGL	01. mill tonnes NGL
	Gas reserves are included under Troll phase I.	
<b>Production</b>	Estimated production in 2003: Oil: 24 000 b/d Gas 3.0 bn scm, NGL 0.03 tonnes	
<b>Investment</b>	Total investment is likely to be NOK 4.7 bn (2003 value). NOK 3.6 bn (2003 value) had been invested at 31.12.02.	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Tune is a gas and condensate field proven in 1995, about 10 km west of the Oseberg field centre. The bulk of its reserves lie in production licence 190, but part of them extends into production licences 034 and 053. Licence interests in 034 and 190 are the same, and the Tune licensees have purchased production rights for the reserves extending into 053.

Phase I of the development covers four production wells drilled from a subsea installation centrally placed on the field and tied back to Oseberg D through two 12-inch flowlines and an umbilical. A Tune receiving module has been built on Oseberg D.

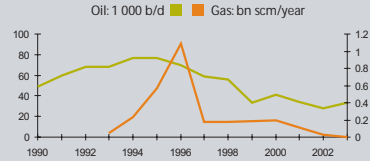
Tune condensate will be stabilised at the Oseberg field centre and piped to Sture through the Oseberg Transport System. Gas from the field is due to be injected in Oseberg, but the Tune licensees will receive sales gas in exchange from the Oseberg Unit at the inlet to the Oseberg Gas Transport system.

## Vale

<b>Block and production licence</b>	Block 25/4 - production licence 036. Awarded 1971.	
<b>Progress</b>	Government approval: March 2001 Production start-up: 31 May 2002	
<b>Operator</b>	Norsk Hydro Produksjon a.s	
<b>Licensees</b> (rounded off to two decimal places)	Marathon Petroleum Norge A/S	46.90%
	Norsk Hydro Produksjon a.s	28.53%
	TotalFinaElf Exploration Norge AS	24.24%
	AS Ugland Rederi	0.32%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	2.6 mill scm oil	2.5 mill scm oil
	2.2 bn scm gas	2.2 bn scm gas
	Gas reserves are included under Troll phase I.	
<b>Production</b>	Estimated production in 2003: Oil: 15 000 b/d Gas: 0.54 bn scm.	
<b>Investment</b>	Total investment is likely to be NOK 1.6 bn (2003 value). NOK 1.5 bn (2003 value) had been invested at 31.12.02.	

Proven in 1991, Vale lies 16 km north of Heimdal and has been developed with a single subsea well, a seabed template and a 16.5-km flowline. The latter is tied back to the Heimdal platform for processing the wellstream. Existing pipeline systems are being used to export the field's output.





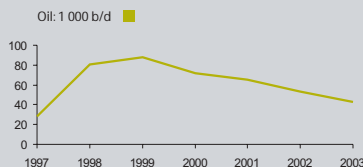
## Veslefrikk

Blocks and production licences	Block 30/3 - production licence 052. Awarded 1979. Block 30/6 - production licence 053. Awarded 1979.
Progress	Government approval: June 1987 Production start-up: December 1989
Operator	Statoil ASA
Licensees	Petoro AS <sup>1</sup> 37.0% Statoil ASA 18.0% TotalFinaElf Exploration Norge AS 18.0% RWE Dea Norge AS 13.5% Paladin Resources Norge AS 9.0% Svenska Petroleum Exploration A/S 4.5%
Recoverable reserves	Originally present: 55.0 mill scm oil 3.0 bn scm gas 1.1 mill tonnes NGL Remaining at 31.12.02: 13.2 mill scm oil 0.9 bn scm gas
Production	Estimated production in 2003: Oil: 33 000 b/d
Investment	Total investment is likely to be NOK 17.4 bn (2003 value). NOK 15.6 bn (2003 value) had been invested at 31.12.02.
Operating organisation	Bergen
Main supply bases	Coast Center Base, Sotra and Florø

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Proven in 1981, Veslefrikk has been developed with the fixed A wellhead platform and the B semi-submersible for processing and quarters in about 175 metres of water. The oil is piped to Oseberg A for onward transmission through the Oseberg Transport System (OTS) to the terminal at Sture near Bergen, while the gas travels via Statpipe.

Veslefrikk B was taken to land in the summer of 1999 to reinforce its steel hull and to make the modifications required to receive Huldra condensate from the autumn of 2001. The normally unstaffed platform on the latter field is remotely operated from Veslefrikk B.

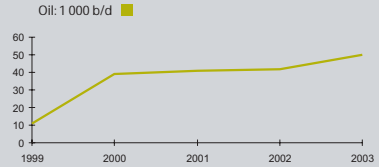


## Vigdis

Block and production licence	Block 34/7 - production licence 089. Awarded 1984.	
Progress	Government approval: December 1994 Production start-up: January 1997	
Operator	Statoil ASA	
Licensees	Petoro AS <sup>1</sup>	30.00%
	Statoil ASA	28.22%
	Norsk Hydro Produksjon a.s	13.28%
	Esso Expl & Prod Norway AS	10.50%
	Idemitsu Petroleum Norge AS	9.60%
	TotalFinaElf Exploration Norge AS	5.60%
	RWE Dea Norge AS	2.80%
Recoverable reserves	Originally present: 39.7 mill scm oil 3.2 bn scm gas	Remaining at 31.12.02: 17.4 mill scm oil 3.2 bn scm gas
Production	Estimated production in 2003: Oil: 43 000 b/d	
Investment	Total investment is likely to be NOK 12.1 bn (2003 value). NOK 7.6 bn (2003 value) had been invested at 31.12.02.	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Located between Snorre and Gullfaks, Vigdis was discovered in 1986 and began production in January 1997. It has been developed with subsea installations in 280 metres of water. These are tied back to Snorre, where the petroleum is processed. Stabilised crude oil is transferred via a dedicated pipeline to Gullfaks A for storage and loading into tankers. The Vigdis extension project was approved by the King in Council in December 2002, and is expected to come on stream around the end of 2003. This development extends production from the existing field.



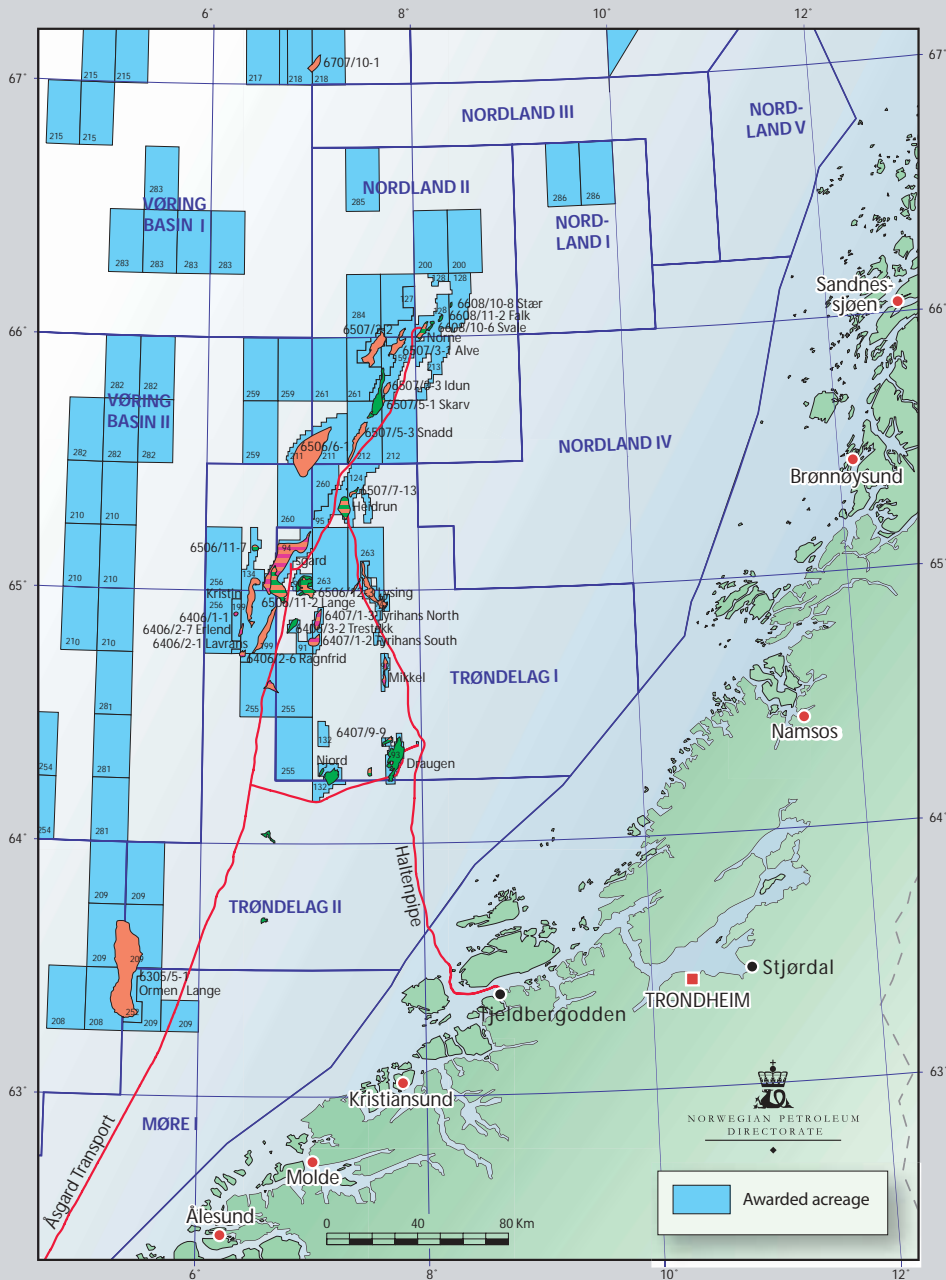
## Visund

Block and production licence	Block 34/8 - production licence 120. Awarded 1985.	
Progress	Government approval: March 1996 Production start-up: April 1999	
Operator	Statoil ASA	
Licensees	Statoil ASA	32.9%
	Petoro AS <sup>1</sup>	30.0%
	Norsk Hydro Produksjon a.s	20.3%
	Norske Conoco A/S	9.1%
	TotalFinaElf Exploration Norge AS	7.7%
Recoverable reserves	Originally present:	Remaining at 31.12.02:
	38.4 mill scm oil	30.5 mill scm oil
	50.3 bn scm gas	50.3 bn scm gas
	6.7 mill tonnes NGL	6.7 mill tonnes NGL
Production	Estimated production in 2003: Oil: 50 000 b/d	
Investment	Total investment is likely to be NOK 19.3 bn (2003 value). NOK 14.8 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Bergen	
Main supply base	Florø	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

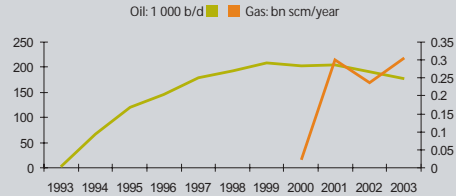
Proven in 1986, Visund lies east of Snorre. It has been developed with a steel-hulled floating platform for production, drilling and quarters, with oil piped to Gullfaks A for storage and export.

Visund gas export was approved by the government in October 2002. This project involves a new pipeline from Visund to tie into the Kvitebjørn gas pipeline for onward transport to Kollsnes. The gas will be processed in the NGL plant at Kollsnes and transported through the existing pipeline to continental Europe.



## Norwegian Sea

The Norwegian Sea was opened for exploration in connection with the fifth offshore licensing round in 1979. The Draugen oil field was the first Norwegian Sea discovery to be developed, and came on stream in October 1993. Heidrun, Njord, Norne and Åsgard have since started production, while plans for development and operation (PDOs) for Kristin and Mikkel were approved in 2001. About 24 per cent of Norway's oil production derived from the Norwegian Sea in 2002. This region also contains substantial gas resources.



## Draugen

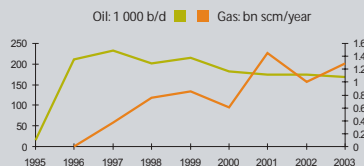
Block and production licence	Block 6407/9 - production licence 093. Awarded 1984.	
Progress	Government approval: December 1988 Production start-up: October 1993	
Operator	A/S Norske Shell	
Licensees	Petoro AS <sup>1</sup>	47.88%
	A/S Norske Shell	26.20%
	BP Norge AS	18.36%
	Chevron Texaco Norge AS	7.56%
Recoverable reserves	Originally present: 134.5 mill scm oil 6.0 bn scm gas 1.7 mill tonnes NGL	Remaining at 31.12.02: 46.6 mill scm oil 5.5 bn scm gas 1.1 mill tonnes NGL
Production	Estimated production in 2003: Oil: 177 000 b/d Gas: 0.31 bn scm NGL: 0.31 mill tonnes	
Investment	Total investment is likely to be NOK 27 bn (2003 value). NOK 24.5 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Kristiansund	
Main supply base	Kristiansund	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Draugen was discovered in 1984 in 251 metres of water, and has been developed with a concrete monotower gravity base structure supporting an integrated topside. The field is currently producing from six horizontal platform wells.

Reserves consist mainly of oil. Associated gas is piped to Kårstø via a tie-in with the Åsgard Transport trunkline. Oil is loaded into shuttle tankers on the field via two flowlines which link the platform with a floating loading buoy.

Garn West, a separate oil deposit in the Draugen field, was developed and brought on stream in 2001 with two subsea wells tied back via a flexible flowline to the Draugen platform. A similar structure, Rogn South, was developed and brought on stream via Garn West during 2002.



## Heidrun

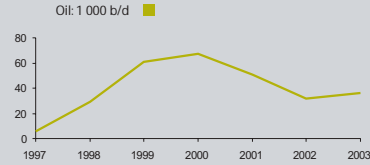
<b>Blocks and production licences</b>	Block 6507/7 - production licence 095. Awarded 1984. Block 6507/8 - production licence 124. Awarded 1986.	
<b>Progress</b>	Government approval: May 1991 Production start-up: October 1995	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b> <small>(rounded off to two decimal places)</small>	Petoro AS <sup>1</sup>	58.16%
	Norske Conoco A/S	24.29%
	Statoil ASA	12.43%
	Fortum Petroleum AS	5.12%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	180 mill scm oil	98.3 mill scm oil
	29.9 bn scm gas	25.4 bn scm gas
	1.8 mill tonnes NGL	1.7 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 169 000 b/d Gas: 1.3 bn scm NGL: 0.1 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 63.2 bn (2003 value). NOK 51.1 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Stjørdal	
<b>Main supply base</b>	Kristiansund	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

The Heidrun field was discovered in 1985 and lies in some 350 metres on the Halten Bank off mid-Norway. A revised development plan submitted in December 1989 was approved by the government, and embraces a concrete tension leg platform (TLP).

Heidrun's northern flank is being developed with subsea installations in order to phase in resources in this part of the field.

Associated gas from Heidrun is carried in the dedicated Haltenpipe line to Tjeldbergodden in mid-Norway for conversion to methanol. The separate Heidrun gas export pipeline ties into the Åsgard Transport system to transport gas to Kårstø.



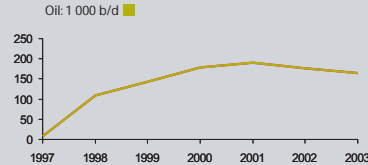
## Njord

Blocks and production licences	Block 6407/7 - production licence 107. Awarded 1985. Block 6407/10 - production licence 132. Awarded 1987.	
Progress	Government approval: June 1995 Production start-up: September 1997	
Operator	Norsk Hydro Produksjon a.s	
Licensees	Norsk Hydro Produksjon a.s	20.0%
	Gaz de France Norge AS	20.0%
	Mobil Development Norway A/S	20.0%
	Norske Conoco A/S	15.0%
	Paladin Resources Norge AS	15.0%
	Petoro AS <sup>1</sup>	7.5%
	OER Oil AS	2.5%
Recoverable reserves	Originally present: 23.9 mill scm oil	Remaining at 31.12.02: 9.6 mill scm oil
Production	Estimated production in 2003: Oil: 36 000 b/d.	
Investment	Total investment is likely to be NOK 11.8 bn (2003 value). NOK 10.3 bn (2003 value) had been invested at 31.12.02.	
Operating organisation	Kristiansund	
Main supply base	Kristiansund	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Njord was proven in 1986 and lies in 330 metres of water about 30 km west of Draugen. Coming on stream in September 1997, the field has been developed with a steel-hulled semi-submersible production, drilling and quarters platform - Njord A. Subsea wells are tied back to this facility, with oil stored in a dedicated vessel - Njord B - located 2.5 km from the production platform.

The crude is transferred via a flowline, with power supplied by cable from the platform. Oil is loaded into shuttle tankers for transport to the market. Njord B is remotely operated from the A platform except during discharging operations and maintenance campaigns.



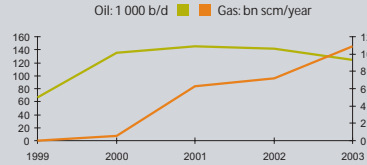
## Norne

<b>Blocks and production licences</b>	Block 6608/10 - production licence 128. Awarded 1986. Block 6508/1 - production licence 128B. Awarded 1998.	
<b>Progress</b>	Government approval: March 1995 Production start-up: November 1997	
<b>Operator</b>	Statoil ASA	
<b>Licensees</b>	Petoro AS <sup>1</sup>	54.0%
	Statoil ASA	25.0%
	Norsk Hydro Produksjon a.s	8.1%
	Norsk Agip AS	6.9%
	Enterprise Oil Norge AS	6.0%
<b>Recoverable reserves</b>	Originally present:	Remaining at 31.12.02:
	87.4 mill scm oil	40.4 mill scm oil
	13.7 bn scm gas	11.8 bn scm gas
	1.4 mill tonnes NGL	1.3 mill tonnes NGL
<b>Production</b>	Estimated production in 2003: Oil: 164 000 b/d Gas: 0.9 bn scm NGL: 0.098 mill tonnes	
<b>Investment</b>	Total investment is likely to be NOK 19 bn (2003 value). NOK 15.1 bn (2003 value) had been invested at 31.12.02.	
<b>Operating organisation</b>	Harstad	
<b>Main supply base</b>	Sandnessjøen	

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Norne lies in 380 metres of water, about 80 km north of Heidrun and roughly 200 km from the north Norwegian coast. The field has been developed with a production and storage ship tied to subsea templates. Flexible risers carry wellstreams to the vessel, which weathervanes around a cylindrical turret moored to the seabed. This ship carries processing facilities on its deck and storage tanks for oil. Processed crude can be transferred over the stern to tankers. A pipeline tied into the Åsgard Transport system has been laid for gas export.





## Åsgard

### Blocks and production licences

Block 6407/2 - production licence 074. Awarded 1982.  
 Block 6407/3 - production licence 237. Awarded 1998.  
 Block 6506/11 - production licence 134. Awarded 1987.  
 Block 6506/12 - production licence 094. Awarded 1984.  
 Block 6507/11 - production licence 062. Awarded 1981.  
 Block 6406/3 - production licence 094B. Awarded 2002

### Progress

Government approval: June 1996  
 Production start-up: May 1999

### Operator

Statoil ASA

### Licensees

Petoro AS <sup>1</sup>	35.50%
Statoil ASA	25.00%
Norsk Hydro Produksjon a.s	9.60%
Norsk Agip AS	7.90%
TotalFinaElf Exploration Norge AS	7.65%
Mobil Development Norway A/S	7.35%
Fortum Petroleum AS	7.00%

### Recoverable reserves

Originally present:	Remaining at 31.12.02:
67.9 mill scm oil	39.6 mill scm oil
191.9 bn scm gas	180.2 bn scm gas
32.9 mill tonnes NGL	31.4 mill tonnes NGL
47.1 mill scm condensate	43.3 mill scm condensate

### Production

Estimated production in 2003:  
 Oil: 124 000 b/d Gas: 10.9 bn scm NGL: 1.75 mill tonnes  
 Condensate: 4.88 mill scm

### Investment

Total investment is likely to be NOK 60.1 bn (2003 value).  
 NOK 54.6 bn (2003 value) had been invested at 31.12.02.

### Operating organisation

Stjørdal

### Main supply base

Kristiansund

<sup>1</sup> Petoro AS serves as the licensee for the SDFI.

Åsgard comprises the Midgard, Smørbukk and Smørbukk South discoveries, made in 1981, 1984 and 1985 respectively. Water depths are in the 240-300 metre range.

The field has been developed with the Åsgard A production ship for oil and condensate, which came on stream in May 1999, and the Åsgard B floating gas platform. The latter began production in October 2000.

Rich gas is piped to Kårstø north of Stavanger for processing and fractionation of the liquid components, with the dry gas sent on to continental Europe through the Europipe II line.

## Fields which have ceased production

The following fields had ceased to produce at 31 December 2001

### Albuskjell

Blocks	1/6 and 2/4
Development approved	1975
Cessation plan/ decommissioning	The cessation plan was approved by the authorities on 21 December 2001 and in Report no 47 (1999-2000) to the Storting.
Production start-up	1979
Production ceased	1998
Total production over field lifetime	Oil: 7.4 mill scm Gas: 15.5 bn scm NGL: 1 mill tonnes

### Cod

Block	7/11
Development approved	1973
Cessation plan/ decommissioning	The cessation plan was approved by the authorities on 21 December 2001 and in Report no 47 (1999-2000) to the Storting.
Production start-up	1977
Production ceased	1998
Total production over field lifetime	Oil: 2.9 mill scm Gas: 7.3 bn scm NGL: 0.5 mill tonnes

### East Frigg

Block	25/1 and 25/2
Development approved	1984
Cessation plan/ decommissioning	Storting proposition no 8 (1998-1999) and Report no 47 (1999-2000) to the Storting.
Production start-up	1988
Production ceased	1997
Total production over field lifetime	Gas: 9.2 bn scm Condensate: 0.1 mill scm

### Edda

Block	2/7
Development approved	1975
Cessation plan/ decommissioning	The cessation plan was approved by the authorities on 21 December 2001 and in Report no 47 (1999-2000) to the Storting.
Production start-up	1979
Production ceased	1998
Total production over field lifetime	Oil: 4.8 mill scm Gas: 2 bn scm NGL: 0.2 mill tonnes

## Frøy

Blocks	25/2 and 25/5
Development approved	1992
Cessation plan/ decommissioning	The cessation plan was approved by the authorities on 29 May 2001 and Report no 47 (1999-2000) to the Storting.
Production start-up	1995
Production ceased	2001
Total production over field lifetime	Oil: 5.6 mill scm Gas: 1.6 bn scm Condensate: 0.1 mill tonnes

## Lille-Frigg

Block	25/2
Development approved	1991
Cessation plan/ decommissioning	Storting proposition no 53 (1999-2000) and Report no 47 (1999-2000) to the Storting.
Production start-up	1994
Production ceased	1999
Total production over field lifetime	Gas: 2.2 bn scm Condensate: 1.3 mill scm

## Mime

Block	7/11
Development approved	1992
Cessation plan/ decommissioning	Storting proposition no 15 (1996-1997) and Report no 47 (1999-2000) to the Storting.
Production start-up	1990
Production ceased	1993
Total production over field lifetime	Oil: 0.4 mill scm Gas: 0.1 bn scm

## North-East Frigg

Blocks	25/1 and 30/10
Development approved	1980
Cessation plan/ decommissioning	Storting proposition no 36 (1994-95)
Production start-up	1983
Production ceased	1993
Total production over field lifetime	Gas: 11.6 bn scm NGL: 0.04 mill tonnes

## Odin

Blocks	30/10
Development approved	1980
Cessation plan/ decommissioning	Storting proposition no 50 (1995-1996) and Report no 47 (1999-2000) to the Storting.
Production start-up	1984
Production ceased	1994
Total production over field lifetime	Gas: 27.3 bn scm

## Tommeliten Gamma

Block	1/9
Development approved	1986
Cessation plan/ decommissioning	Storting proposition no 53 (1999-2000) and Report no 47 (1999-2000) to the Storting.
Production start-up	1988
Production ceased	1998
Total production over field lifetime	Oil: 3.9 mill scm Gas: 9.7 bn scm NGL: 0.6 mill tonnes

## West Ekofisk

Block	2/4
Development approved	1973
Cessation plan/ decommissioning	The cessation plan was approved by the authorities on 21 December 2001 and in Report no 47 (1999-2000) to the Storting.
Production start-up	1977
Production ceased	1998
Total production over field lifetime	Oil: 12.2 mill scm Gas: 26 bn scm NGL: 1.4 mill tonnes

## Yme

Block	9/1, 9/2 and 9/5
Development approved	1995
Cessation plan/ decommissioning	The cessation plan was approved by the authorities on 4 May 2001
Production start-up	1996
Production ceased	2001
Total production over field lifetime	Oil: 7.9 mill scm

