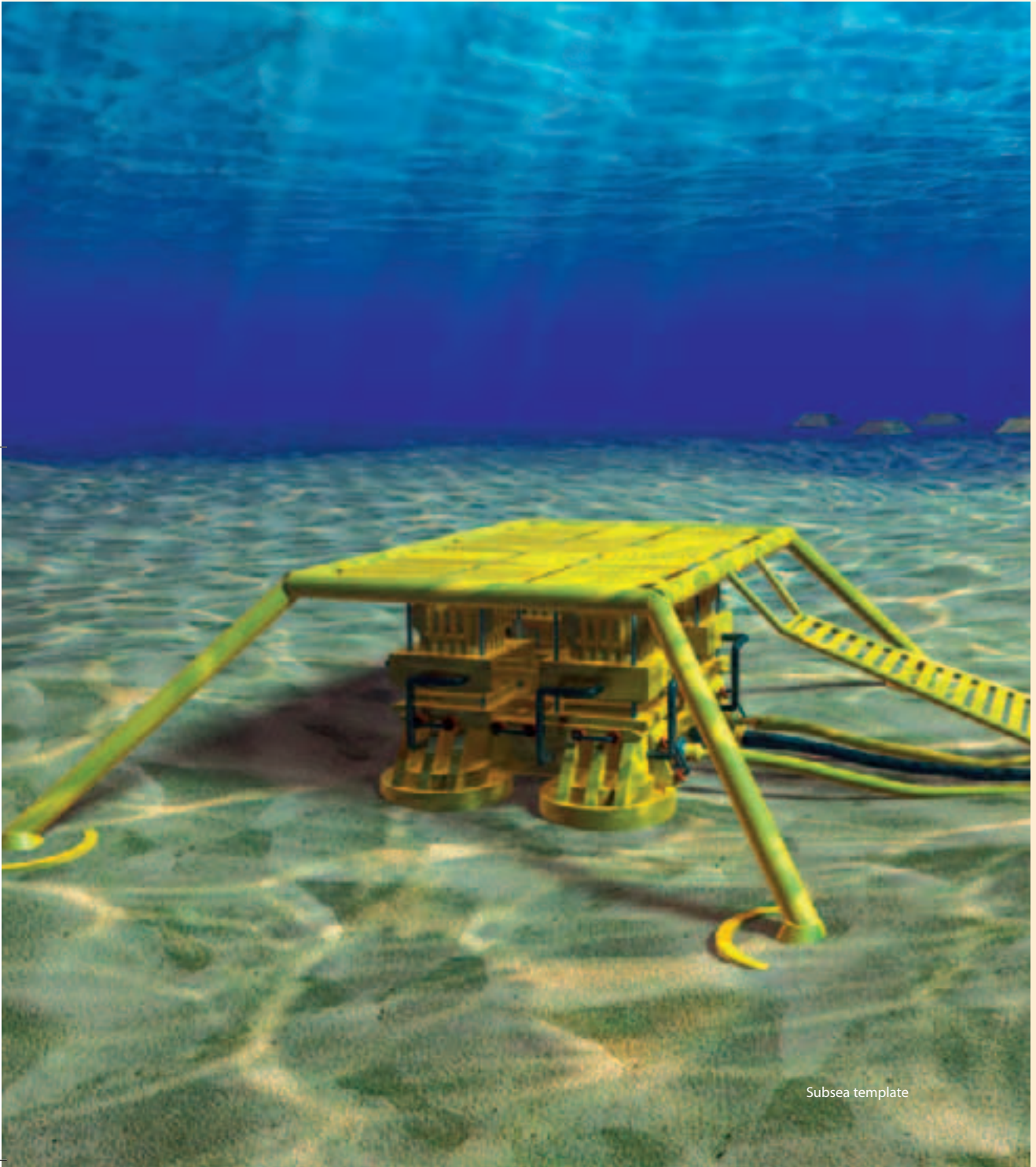


12

Future developments



Subsea template



Discoveries in the planning phase

Excludes discoveries included under new resources in existing fields.

1/2-1 Blane	Production licence 143 BS, Operator: Paladin Resources Norge AS
Resources	Oil: 0.8 million scm Gas: 0.1 billion scm

1/2-1 Blane lies on the boundary between the UK and Norwegian sectors and contains oil. The reservoir is in marine sandstone of the Paleogene period. On the basis of mapping and reservoir studies, it is anticipated that the majority of the resources lie on the UK side of the boundary.

PDO is expected in the spring of 2005. Development will be based on a well head facility with two production wells and one water injection well with a pipeline to the Ula field.

2/12-1 Freja	Production licence 113, Operator: Amerada Hess Norge AS
Resources	Oil: 2.9 million scm Gas: 0.6 billion scm

2/12-1 Freja lies near the boundary between the Danish and Norwegian sectors and contains oil and associated gas. The reservoir is in Late Jurassic sandstone at a depth of some 4,900 metres. 2/12-1 lies in a complex fault region between the Feda graben in the west and the Gertrud graben in the east. The reservoir is presumed to be divided into separate fault blocks. Oil has also been proven in a deposit named Gert on the Danish side of the dividing line.

2/12-1 was declared commercially viable in June 1992. It is most likely that the discovery will be assigned a straightforward development solution based on the use of existing infrastructure in the area.

3/7-4 Trym	Production licence 147, Operator: A/S Norske Shell
Resources	Gas: 3.3 billion scm Condensate: 0.8 million scm

3/7-4 Trym lies near the boundary between the Danish and Norwegian sectors and contains gas and condensate. The reservoir lies in Late and Mid-Jurassic sandstone, in the same salt-induced structure as the Danish Lulita field. It is presumed to be separate from a fault zone on the north side of the dividing line, but there may be pressure communication in the water zone.

It is most likely that the discovery will be assigned a straightforward development solution based on the use of existing infrastructure in the Danish sector. PDO is expected to be submitted to the authorities during 2005.



15/3-1 S Gudrun	Production licence 025, 187, Operator: Statoil ASA
Resources	Oil: 15.2 million scm Gas: 8.4 billion scm NGL: 5.4 million tonnes

15/3-1 Gudrun lies 13 km east of the boundary between the UK and Norwegian sectors and about 50 km north of the Sleipner area and contains both oil and gas. The reservoir is in Late Jurassic sandstone at a depth of some 4,000-4,500 metres. Development will be based on subsea installations tied back through a transport solution to existing infrastructure.

15/5-1 Dagny	Production licence 029, 048, Operator: Statoil ASA
Resources	Gas: 3.8 billion scm NGL: 0.2 million tonnes Condensate: 1.2 million scm

15/5-1 Dagny lies due north-west of the main Sleipner Vest structure and is a small discovery containing gas and condensate; it is divided into two production licences, 048 and 029. The reservoirs consist of Mid-Jurassic sandstone in the Hugin formation.

Development will most likely be based on a subsea facility tied back to existing infrastructure at Sleipner A or to Sleipner T via Alfa Nord. 15/5-1 Dagny may come on stream during 2008-2010 when there is available capacity on the Sleipner field.

15/9-19 S Volve	Production licence 046, Operator: Statoil ASA
Resources	Oil: 11.0 million scm Gas: 1.2 billion scm NGL: 0.2 million tonnes Condensate: 0.1 million scm

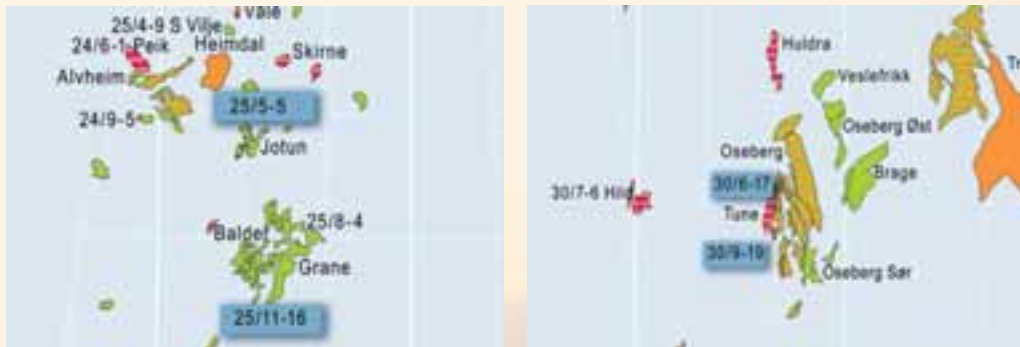
15/9-19 Volve lies approx. 8 km north of the Sleipner A facility on Sleipner Øst and approx. 3 km west of Loke. The reservoir is in a combined stratigraphic and structural fault and consists of Jurassic/Triassic rock in the Hugin formation in the Theta Vest structure. The reservoir contains oil. The western section of the structure is heavily faulted and there is uncertainty about communication between the faults. Around 80 per cent of the oil present has however been mapped in the eastern section of the structure, where there is less uncertainty about interpretation.

The development concept consists of a jack-up processing and drilling facility and a ship to store stabilised oil. Rich gas will be transported to Sleipner A for onward export. A PDO was submitted to the authorities in February 2005.

15/12-12	Production licence 038, Operator: Petra AS
Resources	Gas: 4.3 billion scm Condensate: 1.4 million scm

The 15/12-12 discovery lies in the southern North Sea near the boundary between the Norwegian and UK sectors. It lies around a salt structure. The reservoir consists of Late Jurassic sandstone and has a gas-capped oil zone. It has been divided by the operator into three zones, the first two of which have good reservoir characteristics. The top of the reservoir lies at a depth of approx. 2,823 metres. Pressure measurements on 15/12-12 show that it is in pressure communication with the Varg field.

The operator is working on plans to develop the discovery.



25/5-5	Production licence 102, Operator: Total E&P Norge AS
Resources	Oil: 3.5 million scm Gas: 0.1 billion scm

The 25/5-5 discovery lies approx. 8 km east of the Heimdal field and the water depth here is some 120 metres. The reservoir is in sandstone of Paleocene age, laid down as turbidite flows from the west. It is about 2,130 metres below sea level. The discovery well proved an oil column of 18 metres.

The discovery is located near existing infrastructure in an area with a number of small new discoveries. Potential development is being assessed, but there are no concrete plans as yet.

25/11-16	Production licence 169, Operator: Norsk Hydro Produksjon AS
Resources	Oil: 3.6 million scm

The 25/11-16 discovery lies due west of the Grane field and contains oil and associated gas. The reservoir is in Paleocene sandstone in the Heimdal formation at a depth of some 1,750 metres. It is in an area with a series of sand structures that are part of a submarine fan system.

There are a number of options available for development, the most likely of which is a subsea tie-back to Grane, or possible long-range wells from Grane.

30/6-17	Production licence 053, Operator: Norsk Hydro Produksjon AS
Resources	Gas: 1.5 billion scm

30/6-17 is a small oil and gas discovery in the Oseberg area. The reservoir is in Early Jurassic sandstone of the Cook formation and lies below the main reservoir in the Oseberg field at a depth of 2,200 metres. It contains mainly gas, with a thin oil zone.

A likely development will be using a long-range production well at about 9,500 metres from Oseberg B. Because of planned continuous drilling from Oseberg B to well targets in the Oseberg field, drilling of a production well for the 30/6-17 discovery will probably not take place before 2007.

30/9-19	Production licence 079, 190, Operator: Norsk Hydro Produksjon AS
Resources	Oil: 2.3 million scm Gas: 5.9 billion scm

The 30/9-19 discovery was proven in 1998. The discovery has a 14 metre thick oil column with a gas cap in the delta structure in the Oseberg field. The reservoir is at a depth of 3,200 metres and consists of Mid-Jurassic sandstones (the Tarbert and Ness formations). The PDO for the 30/9-19 discovery is under preparation and is planned to be submitted to the authorities in July 2005.



34/10-23 Valemon Production licence 050, 193, Operator: Statoil ASA

Resources Gas: 18.1 billion scm NGL: 0.8 million tonnes Condensate: 5.6 million scm

34/10-23 Valemon lies in blocks 34/11 and 34/10. Four exploration wells have been drilled, three of them proving gas. The discovery has a complex structure with many faults. The reservoirs are in Mid-Jurassic sandstone in the Brent group and Cook formation. They are some 4,000 metres deep, and at high temperature and pressure.

The plan is to drill an appraisal well in 34/10-23 Valemon from Kvitebjørn in 2005. The discovery is planned to be developed using a subsea template tied back to existing infrastructure, with Kvitebjørn being the most likely tie-back point. The use of long-range production wells from Kvitebjørn will also be assessed.

35/9-1 GjØa Production licence 153, Operator: Statoil ASA

Resources Oil: 7.1 million scm Gas: 30.4 billion scm Condensate: 1.4 million scm

35/9-1 GjØa was proven in 1989 and lies about 42 km north of the Fram field. The area, consisting of several segments with some uncertain communication, contains a reservoir in sandstone in the Fensford formation. The discovery contains gas with a relatively thin oil zone.

Statoil is the operator in the development phase, while Gaz de France will take over operating responsibility when the field comes on stream. A number of different development options have been evaluated, including a production ship (FPSO), fixed facilities and subsea development. The choice of concept will be made in the spring of 2005. The PDO is planned to be submitted to the authorities at year-end 2005.

6407/1-2 Tyrhans Sør Production licence 073, 091, Operator: Statoil ASA

Resources Oil: 24.7 million scm Gas: 32.6 billion scm NGL: 5.8 million tonnes

6407/1-2 Tyrhans Sør also includes 6407/1-3 Tyrhans Nord. The two discoveries were proven in 1982 and 1983 respectively and lie approx. 25 km south-east of the Åsgard field. In addition to the wildcat wells, an appraisal well was drilled in each of the two discoveries. 6407/1-2 Tyrhans Sør has an oil column with a condensate-rich gas cap. 6407/1-3 Tyrhans Nord contains gas condensate with an underlying oil column. The main reservoir for both discoveries is the Garn formation.

The licensees have opted for a subsea tie-back with processing at Kristin. The PDO will probably be submitted to the authorities in the summer of 2005. Recovery will be based on gas injection from Åsgard B into 6407/1-2 Tyrhans Sør in the initial years. Underwater pumps will also be used for the injection of seawater to further increase recovery. The licensees have also evaluated other measures to improve fluid recovery, such as an extended period of gas injection and recovery of the oil zone in 6407/1-3 Tyrhans Nord.

In 2004, the licensees made investments in advance in the Kristin facilities, now under construction, to reduce the extent of work at sea on the Kristin field.



6507/3-3 Idun	Production licence 159, Operator: Statoil ASA
Resources	Gas: 13.2 billion scm NGL: 0.9 million tonnes Condensate: 0.3 million scm

6507/3-3 Idun lies between Heidrun and Norne in a faulted area of the Dønna terrace in the Nordland II area. The discovery contains gas. The reservoir consists of Mid-Jurassic sandstones. The top of the reservoir lies at a depth of about 3,330 metres.

Work is being done on various development options for the discoveries in the area. At present, a subsea facility with tie-back to a future field centre at 6507/5-1 Skarv is the most likely. A decision on developing the discoveries in the area and the choice of development concept may be made in 2005.

6507/5-1 Skarv	Production licence 159, 212, 212 B, 262, Operator: BP Norge AS
Resources	Oil: 14.1 million scm Gas: 38.4 billion scm NGL: 6.1 million tonnes Condensate: 3.9 million scm

6507/5-1 Skarv was proven in 1998 and contains oil and gas in Jurassic and Cretaceous sandstone in three fault segments. The discovery lies about 200 km off the Helgeland coast, mainly in production licence 212, but also in 262 and 159, and is in about 400 metres of water.

Skarv is seen as a potential field centre for oil recovery and gas export through a tie-back to existing infrastructure. It is assumed that development will be based on a stand-alone development concept. Both a production ship and a semi-submersible production facility are under evaluation. Development and the timing of a production start-up depend on finding an export solution for the gas.

7122/7-1 Goliat	Production licence 229, Operator: Eni Norge AS
Resources	Oil: 6.9 million scm

The 7122/7-1 Goliat oil discovery lies between the Snøhvit field and Hammerfest. The reservoir is sandstone from the Late Triassic to Mid-Jurassic ages and lies about 1,100 metres below sea level. The discovery consists of a series of structural segments lying up against the Troms-Finnmark fault.

Drilling is planned during 2005 to ascertain whether the discovery can be developed.



Discoveries decided by the licensees

25/4-9 S Vilje	Production licence 036, Operator: Norsk Hydro Produksjon AS
Resources	Oil: 8.9 million scm

25/4-9 S Vilje lies about 11 km NNE of the Heimdal field and 5 km south-west of Vale. The sea in the area is 120 metres deep. The reservoir consists of turbidite sandstone of Paleocene (Early Tertiary) age at around 2,150 metres below sea level. The discovery well proved an approx. 65 metres oil column in sand from the Heimdal subsection of the Lista formation.

Norsk Hydro Produksjon AS submitted a PDO for Vilje on behalf of the licensees on 23.12.2004 and the plan was approved 18.03.2005. Vilje is planned to be developed using two subsea wells tied to the Alvheim FPSO when in place. Recovery of the resources will be by natural waterdrive. Production start-up is planned for February 2007.

33/12-8 A Skinfaks	Production licence 152, Operator: Statoil ASA
Resources	Oil: 3.0 million scm Gas: 1.5 billion scm NGL: 0.3 million tonnes Condensate: 0.2 million scm

33/12-8 Skinfaks is located in the Gullfaks area, and contains gas in the upper section of the reservoir, with oil in the lower. The reservoir is sandstone in the Mid-Jurassic Brent group and the Early Jurassic Statfjord formation. The Skinfaks discovery consists of several reservoirs in separate, rotated fault blocks. The Brent reservoir is approx. 2,800 metres deep and the Statfjord reservoir is approx. 3,300 metres deep.

The PDO for development was submitted to the authorities in December 2004. The plan is to develop Skinfaks using a subsea template and a satellite well, and with pipelines to Gullfaks Sør for onward transport in an existing pipe to Gullfaks C. The development will be coordinated with additional development of Rimfaks and Gullfaks Sør. Skinfaks will be included in Gullfaks Sør. Production start-up is planned for 2007.

The PDO for Skinfaks was approved by the King in Council of State on 11.02.2005.

