

## Annual Statement of Reserves

### Classification of Reserves and Contingent Resources

The reserve and contingent resource volumes have been classified in accordance with the NPD classification system ([http://www.npd.no/regelverk/r2002/Ressursklassifisering\\_n.htm](http://www.npd.no/regelverk/r2002/Ressursklassifisering_n.htm)) and are consistent with Oslo Stock Exchange's guidelines for the disclosure of hydrocarbon reserves and contingent resources, see figure below.

	Potential Resources		Contingent Resources				Reserves		
NPD category	9	8	7	6	5	4	3	2	1
Description	Leads. Conceptual ideas of possible prospects	Prospects. A mapped rock volume believed to contain hydrocarbons	Discoveries under evaluation	Discoveries where development is unlikely	Discoveries where development is likely	Discoveries where development is being planned	Fields where PDO has been concluded by the Licensees	Fields under development, PDO approved	Fields in production

*Fig. 1: NPD's classification system used by Det norske oljeselskap*

### Reserves, Developed and Undeveloped

Det norske oljeselskap ASA has interests in four fields in production (Category 1):

- Varg – operated by Talisman, Det norske 5%
- Glitne – operated by StatoilHydro, Det norske 10%
- Enoch – operated by Talisman, Det norske 2%
- Jotun – operated by ExxonMobil, Det norske 7%

Our assessments of the remaining reserves in these fields are based on the operator's evaluation.

The **Varg Field** (PL 038) is located south of Sleipner Øst. The field is developed with the production vessel "Petrojarl Varg" with integrated oil storage, and a connected wellhead platform. Oil is exported using shuttle tankers. Two new wells were completed in 2008, proving up new reserves and increasing the total production to around 14,000 bopd. Proved reserves (1P/P90) include reserves with an accumulated probability of 90 % from existing wells, assuming no new wells are being drilled. Remaining proved plus probable reserves (2P/P50) are based on production cut-off in 2012 and contain the total volumes from the base case production profile provided by the operator, assuming no infill drilling. Total ultimate recoverable reserves are estimated at 95 million barrels of oil, while total remaining proved and probable reserves are estimated at 16.5 million barrels, hereof 9.4 million barrels developed. The 7 million barrels of undeveloped reserves are associated with planned wells in 2010 and onward. The reserves reflect a longer production time than earlier reported due to an extended lease period with the FPSO owner.

The **Glitne Field** (PL 048 B) is located 40 kilometers northeast of the Sleipner area. The field is produced by sub-sea wells tied to the production vessel "Petrojarl 1", and oil is exported using shuttle tankers. Total reserves are determined by the operator based on decline analysis combined with reservoir simulation and with a production cut-off in 2010. The main

uncertainty in future production is the water cut development in individual wells. Remaining reserves are assessed probabilistically considering relevant uncertainties related to the production. A final production well is under consideration pending the analysis of a recently acquired 4D seismic survey. All proved and probable reserves are classified as “Developed assets”. Total initial recoverable reserves are estimated at 52 million barrels of oil, while remaining reserves are estimated at 2.1 million barrels of oil.

The **Enoch Field** (PL 048B) straddles the Norwegian/UK border and is located in the UK block 16/13a and in the Norwegian block 15/5 southwest of the Glitne Field. The field is developed by a single, horizontal sub-sea well and tied back to the UK Brae A platform where the oil is processed and exported via the Forties pipeline network. The gas is sold to Brae. Production started in May 2007. The field has been unitized with the license owners in British sector, and Det norske’s overall share is 2% (10% of the Norwegian license PL 048 D). Total initial proved plus probable reserves (Enoch Unit) are estimated by the operator at 15 million barrels of oil equivalents of which 10.2 million barrels remain. Volumes in Table 1 include only the Norwegian part of the field and are classified as “Developed assets”.

The **Jotun Field** (PL 027 B, PL 103) is developed with an integrated well head platform (Jotun B) of 24 well slots and a FPSO (Jotun A) with three stage separation. Oil is shuttled to the Slagen refinery and gas is exported into Statpipe. Proved reserves (2P/P50) include expected volume from existing wells, assuming no new wells are being drilled and abandonment of the field in 2015. Total reserves are determined by the operator based on decline analysis combined with reservoir simulation. The main uncertainty in future production is the water cut development in individual wells. Total initial recoverable reserves are estimated at 148 million barrels of oil. Total remaining proved and probable reserves are estimated at 11.41 million barrels oil and classified as “Developed assets”.

Det norske’s share of production from the Varg, Glitne, Enoch, and Jotun fields during 2008 amounts to 0.66 million barrels of oil equivalents.

The **Frøy Field** (PL 364) is operated by Det norske (50%) with Premier Norge AS as a partner. A PDO was submitted to the authorities in September 2008 and subsequently committed by both Det norske and the partner Premier Norge AS. OED has granted an extension of the license for 10 years until 2019. The field was in production from 1995 to 2001 and produced 35 million barrels with Elf as operator. Based on a comprehensive evaluation of the reservoir and production history, the best estimate is that the recovery factor can be increased from the original 18 % to minimum 40 %, increasing recovered volumes by 56 million barrels. The reserves are classified as “Development decided”.

**Table 1 – Reserves by field**

Reserves										
$1 \times 10^9 \text{ Sm}^3 \text{ gas} = 1 \times 10^6 \text{ Sm}^3 \text{ o.e.}$ = 6.29 MBOE										
Developed assets (Category 1)										
As of 31.12.2008	1P / P90 (low estimate)					2P / P50 (best estimate)				
	Liquids (million barrels)	Gas (bcm)	Million barrel of oil equivalents	Interest %	Net million barrel of oil equivalents	Liquids (million barrels)	Gas (bcm)	Million barrel of oil equivalents	Interest %	Net million barrel of oil equivalents
<b>PL 038 - Varg</b>	5.81	0.0	5.81	5%	0.29	9.43	0.0	9.43	5%	0.47
<b>PL 048 B - Glitne</b>	0.73	0.0	0.73	10%	0.07	2.13	0.0	2.13	10%	0.21
<b>Enoch Unit (Norway)</b>	0.43	0.0	0.43	10 %	0.04	1.97	0.01	2.04	10 %	0.20
<b>Jotun Unit</b>	10.24	0.0	10.24	7%	0.72	11.41	0.0	11.41	7%	0.80
<b>Total</b>					1.12					1.69
Under development (Category 2)										
As of 31.12.2008	1P / P90 (low estimate)					2P / P50 (best estimate)				
	Liquids (million barrels)	Gas (bcm)	Million barrel of oil equivalents	Interest %	Net million barrel of oil equivalents	Liquids (mdbl)	Gas (bcm)	Million barrel of oil equivalents	Interest %	Net million barrel of oil equivalents
<b>PL 038 - Varg</b>	3.59	0.0	3.59	5%	0.18	7.02	0.0	7.02	5%	0.35
<b>Total</b>					0.18					0.35
Development decided (Category 3)										
As of 31.12.2008	1P / P90 (low estimate)					2P / P50 (best estimate)				
	Liquids (million barrels)	Gas (bcm)	Million barrel of oil equivalents	Interest %	Net million barrel of oil equivalents	Liquids (million barrels)	Gas (bcm)	Million barrel of oil equivalents	Interest %	Net million barrel of oil equivalents
<b>PL364 - Frøy</b>	34.17	0.0	34.17	50%	17.09	55.82	0.0	55.82	50%	27.91
<b>Total</b>					17.09					27.91

### Contingent Resources

Det norske oljeselskap ASA has interests in ten discoveries classified as contingent resources. Draupne, Ragnarrock Chalk, and Ermintrude are classified as “development likely” (Category 5). Desmond, Bumblebee, Hanz, West Cable, Ragnarrock Basement, and Frigg Gamma are classified as “under evaluation” (Category 7). The Varg Field has contingent resources in both category 4 and 5, and the Ty reservoir in Storskrymten is classified as “development unlikely” (Category 6):

- PL 001 B (Well 16/1-9) Draupne - operated by Det norske 35%
- PL 028 B (Well 25/10-8) Hanz – operated by Det norske 35%
- PL 242 (Well 16/1-7) West Cable – operated by Det norske 35%
- PL 265 (Well 16/2-3) Ragnarrock Chalk– operated by StatoilHydro, Det norske 30% (20% effective 01.01.2009)
- PL 265 (Well 16/2-3) Ragnarrock Basement North – operated by StatoilHydro, Det norske 30% (20% effective 01.01.2009)
- PL 029 B (Well 15/6-9 S) Ermintrude – operated by ExxonMobil, Det norske 20%
- PL 332 (Well 2/2-2) Desmond – operated by Talisman, Det norske 40%
- PL 332 (Well 2/2-5) Bumblebee – operated by Talisman, Det norske 40%
- PL 442 (Well 25/2-10 S) Frigg Gamma – operated by Statoil, Det norske 20%
- 15/12-18S Storskrynten – operated by Det norske 45%

Recoverable resources for **Draupne** are estimated at 75 million barrels oil equivalents. A commercialization study for Draupne and Hanz is ongoing and will be completed in April 2009. The commercial outlook for Draupne is promising. The **Ragnarrock** discovery includes reservoirs both in tight chalk (oil) and in porous basement rocks (oil and gas). The chalk reservoir is estimated to contain 186 million barrels oil in place with confirmed moveable hydrocarbons. However, the volumes of recoverable resources are uncertain and estimated at 42 million barrels by the operator StatoilHydro. In order to confirm commerciality of the tight Ragnarrock chalk reservoir, a third appraisal well is required with an extended well test to reduce uncertainty with respect to well productivity and recovery potential for horizontal wells. Det norske has, as part of a license swap with StatoilHydro, reduced its interest in the Ragnarrock discovery to 20 % effective from 01.01.2009. The promising **Ermintrude** discovery extends into License PL 029 B where Det norske holds a 20 % interest.

For the **Hanz** and **West Cable** oil discoveries total gross recoverable resources are estimated at 9 and 4 million barrels oil, respectively. Recent discoveries in the adjacent area increase the likelihood of development. **Desmond** is a gas discovery and **Bumblebee** an oil discovery adjacent to the Gyda Field. The operator Talisman plans to drill the Optimus prospect in the same license in late 2009. The **Frigg Gamma** discovery in PL 442, just north of Frøy, is estimated at 28 million barrels of oil equivalents. An appraisal/exploration well is planned for 2009 on Frigg Delta.

**Table 2 – Aggregated reserves, production, developments, and adjustments**

Reserves development Net attributed million barrels of oil equivalents. Calendar years, reporting as of year end.	Developed assets		Under development		Development decided	
	1P / P90	2P / P50	1P / P90	2P / P50	1P / P90	2P / P50
Balance as of 31.12.2007	0.5	1.2	5.4	6.8	0.0	0.0
Production	-0.66	-0.66				
Acquisitions/disposals	0.80	0.88	-5.4	-6.7		
Extensions and discoveries						
New developments					17.09	27.91
Revisions of previous estimates	0.52	0.30		0.25		
Balance as of 31.12. 08	1.12	1.74	0.0	0.35	17.09	27.91

Table 3 – Reserves and discovered resources

Resource Category	Norwegian Petroleum Directorate's Classification	Reserves (P90) <i>Million barrels o.e.</i>	Reserves (P50) <i>Million barrels o.e.</i>	Resources (P50) <i>Million barrels o.e.</i>	Risked undiscovered resources (mean) <i>Million barrels o.e.</i>
<b>1</b>	<b>In production</b>	<b>1.12</b>	<b>1.69</b>		
	Enoch Unit	0.04	0.20		
	PL 048 B Glitne	0.07	0.21		
	PL 038 Varg	0.29	0.47		
	Jotun Unit	0.72	0.80		
<b>2</b>	<b>Under development</b>	<b>0.18</b>	<b>0.35</b>		
	PL 038 Varg	0.18	0.35		
<b>3</b>	<b>Development decided</b>	<b>17.09</b>	<b>27.91</b>		
	PL 364 Frøy	17.09	27.91		
<b>4</b>	<b>In the planning phase</b>			<b>0.16</b>	
	PL 038 Varg			0.16	
<b>5</b>	<b>Development likely</b>			<b>42.02</b>	
	PL 001 B Draupne			26.40	
	PL 038 Varg			0.02	
	PL 265 Ragnarrock (Chalk)			12.60	
	PL 029 B Ermintrude			3.00	
<b>6</b>	<b>Development not very likely</b>			<b>2.5</b>	
	PL 337 Storskrynten (Ty)			2.5	
<b>7</b>	<b>Under evaluation</b>			<b>34.00</b>	
	PL 332 Desmond, Bumblebee			12.80	
	PL 028 B Hanz			3.20	
	PL 242 West Cable			1.30	
	PL 265 Ragnarrock (Basement N)			11.00	
	PL 442 Frigg Gamma			5.70	
<b>8</b>	<b>Prospects</b>				<b>547</b>
<b>Total</b>		<b>18.39</b>	<b>29.95</b>	<b>78.69</b>	<b>547</b>

## Management's Discussion and Analysis

The assessment of reserves and resources is performed by experienced professionals in the Det norske based on input from the operators and partners in addition to our own interpretation. The calculations are, however, associated with significant uncertainties. The 2P/P50 estimate represents our best estimate of reserves/resources while the 1P/P90 estimate reflects our high confidence volumes. The methods used for subsurface mapping do not expose all essential parameters for either the actual hydrocarbons in place or the producibility of the hydrocarbons. Therefore there is a certain chance that actual results may be lower than the 1P/P90. A significant change in oil prices may also impact the reserves. Low oil prices may even force the licensees to close down producing fields and cancel ongoing developments.

Det norske's reserves and resources are limited to the Norwegian Continental Shelf. License interests and license terms are listed on the NPD website. The operator will annually, in cooperation with the partners, report reserves to NPD. Five fields in our portfolio have been classified as reserves; two operated by Talisman (Varg and Enoch), one by StatoilHydro (Glitne), one by ExxonMobil (Jotun), and one by Det norske (Frøy). The reserves reported are consistent with the figures agreed to by the partners in the actual licenses and submitted to the authorities. No third-party assessment has been undertaken.

The reserve estimates on the **Varg Field** is based on a production cut-off date in 2012. Planned infill wells are likely to extend the economic field life beyond this date. Further exploration in the area is planned, including drilling of the Grevling prospect in early 2009, and successful exploration results may further extend the life time of the Varg Field.

On the **Glitne Field** a 4D seismic survey has recently been acquired. The results will be decisive regarding the possible drilling of an additional oil producer, which may extend the field life beyond 2010.

Talisman, the operator of the **Enoch Field**, will in 2009 evaluate the development strategy and consider drilling a new production or injection well.

The reserves of the **Jotun Field** include only expected volumes from existing wells and assume no new wells being drilled and abandonment in 2015. Det norske has developed a very strong acreage position and is actively pursuing exploration opportunities in the **Jotun** area. Two exploration wells on the Eitri and Jetta prospects are planned in 2009, and positive results will likely extend the life of the Jotun Field and increase the reserves.

A PDO for the **Frøy Field** was submitted to the authorities in September and subsequently committed by both Det norske and the partner Premier Norge AS. OED has granted an extension of the license for 10 years until 2019. This provides flexibility to improve the commerciality of the projects by reducing costs and proving additional reserves in the area. Three exploration wells within tie-in distance are planned to be drilled in 2009/2010.

Contingent resources listed in this report include ten discoveries. A commercialization study for **Draupne** with a possible **Hanz** tie-in is ongoing and will be completed in early 2009. The commercial outlook for Draupne is promising with several possible development scenarios.

Det norske intends to play an active role in identifying development solutions for the greater Draupne-Ragnarrock-Luno area. An appraisal well on Draupne is planned to be drilled in 2010. Significant exploration potential is adjoining the Ragnarrock discoveries, and a Luno analogue prospect is currently being drilled. In order to confirm commerciality of the tight Ragnarrock chalk discovery, a third appraisal well is required with an extended well test to reduce the uncertainty of the recovery potential. Part of the **Ermintrude** discovery, which is proved to be an extension of the Dagny discovery, extends into PL 029 B where the Freke prospect will be drilled in early 2009. **Desmond** and **Bumblebee** are small discoveries adjacent to the Gyda Field. The operator Talisman plans to drill the Optimus prospect in the same license in late 2009, and positive results from this well will influence the commercial outlook. The Delta prospect located next to the **Frigg Gamma** discovery is planned to be drilled in the second half of 2009, and will, if successful, prove up additional resources which may be tied-in to the Frøy development.

Det norske has an extensive portfolio of mapped prospects which are continuously being evaluated in order to be matured into drillable prospects. The assessment of risked undiscovered resources is 547 million barrels oil equivalents (MBOE), up from 450 MBOE by year end 2007. Our recent awards in TFO 2008 are not included in this number.

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