Our reference AU- EXP NUKE NS-00090 Your reference



Statoil Petroleum AS 1 of 5

Licence surrender report PL 507

Reference is made to the letter sent to MPE dated 2017-09-29 (our reference AU-EXP NUKE ANS-00060), regarding the relinquishment of the production licence 507.

This report outlines the key license history, the database, prospects and the technical evaluation of the production license 507 (PL507) and fulfills the requirement by the NPD for a license status report.

1 Key licence history

The PL507 license is located (Figure 1-1) within block 30/11, 30/12, 25/2 and 25/3 partly within the Fensal Sub-basin and the Bjørgvin Arch. The license was awarded in the APA 2008 licensing round and includes all stratigraphic levels. The work program was a seismic reprocessing and to perform geological/geophysical studies, leading up to a drill or drop descision. A drill decision was made, and well 31/10-1 (Lupus) was drilled in 2014, testing the Paleocene Heimdal. The well was dry. With the emerging exploration success in the PL272/035, the PL507 license work was more focused towards the Middle Jurassic Brent play. Statoil Petroleum AS (Statoil) and Aker BP ASA entered the license in 2016 to look for upsides and synergies with the ongoing drilling campaign within PL272/035.

Since the award several companies has been share holders in the license. By the time of relinquishment the PL507 license shares was:

•	Statoil Petroleum AS, Operator	45 %
•	Aker BP ASA	45 %
•	MOL Norge AS	10 %



Our reference AU- EXP NUKE NS-00090 Your reference

Statoil Petroleum AS

2 of 5



Figure 1-1 Location map for PL507 in the North Sea. The license is outlined with new borders after the partial relinquished in 2016.

Work commitment

Work obligations were:

- Seismic reprocessing
- Study of geology and geophysics
- EM acquisition
- Drill or Drop Decision: 23.06.2013
- BoV: 23.01.2019
- PDO: 23.01.2019

Management and Exploration comitee meetings

During Statoils period as operator the following Management and Exploration comitee meetings have been held:

- 02.05.2016: MC meeting
- 07.09.2016: EC work meeting
- 21.09.2016: EC work meeting
- 06.12.2016: EC/MC meeting
- 15.05.2017: EC work meeting
- 06.09.2017: EC work meeting
- 28.09.2017: MC meeting

Reasons for license surrender

Our reference AU- EXP NUKE NS-00090 Your reference



Statoil Petroleum AS

3 of 5

The post well evaluation of the 2016 drilling campaign in PL272/035, led to reduced volumes in the Middle Jurassic prospects within PL507. In order to form a basis for the BoV by 23.01.2019 the license had to drill a well in 2018. None of the identified prospects had high enough recoverable volumes to form the basis for a robust drilling candidate.

2 Database

2.1 Seismic database

The PL507 common seismic database consist of several released 3D datasets. UHN98 was reprocessed by the license in 2010 and 2012 (UHNWIM10 and UHNWIM11) with resulting near, mid, far, ultrafar and full offset stacks. In addition a post stack seismic merge was created in 2015 (TUN15M02).

In addition a part of the the CGG14003 multiclient broadband survey was added to the seismic database in 2016. The area is shown below (Figure 2-1)



Figure 2-1 Outline of CGG14003 (yellow polygon) and PL507 license

2.2 Well data

The well database used in the evaluation of PL507 is 30/12-1, 25/3-1, 30/11-1, 30/11-2, 30/11-5, 30/11-7 A, 30/11-8 S, 30/11-8 A, 30/11-9 ST2, 30/11-9 A, 30/11-11 A and 30/11-11 S.

3 **Review of geological and geological studies**

The license work has been concentrated upon three different play types

- Middle Jurassic Brent Group play
- Paleocene Heimdal Formation play
- Eocene Frigg Formation play

Our reference AU- EXP NUKE NS-00090 Your reference



Statoil Petroleum AS

Brent GP play and Heimdal Fm play has been the primary target. With shifting shareholders and operators during the license period, but also in relation to well results in nearby areas there has been a shifting license focus of these two play types. Eocene Frigg Formation has been a secondary play type. For the Heimdal play several prospects has been mapped during the license period. The evaluation of these led to the drilling of well 31/10-1 (Lupus prospect), in 2014 by Tullow Oil Norge AS. The well was dry. The remaining Heimdal Fm play is regarded to carry a low probability for trap seal.

The Brent GP play was evaluated before Statoil entered the license in 2016. The PL272/035 license has proven this play type in many wells with most importantly 30/11-8 S (Krafla Main), 30/11-8 A (Krafla West), 30/11-9 ST2 (Askja West) and 30/11-9 A (Askja East). The PL272/035 "fault block trend" with many smaller sized rotated fault blocks continues into the PL507 license, especially in the border area between PL507 and PL272/035. Early 2016 Statoil was about to start a extensive exploration drilling campaign for the Brent GP play in the PL272/035 and decided to farm in to the PL507. A discovery in the planned well 30/11-11 A (Viti) could extend into the PL507 area, but this well turned out to by dry.

4 **Prospect update**

The proven volumes in the PL272/035 2016 drilling campaign was below expectations. During and after the drilling campaign Statoil screened the Brent prospectivity in order to qualify a possible drilling candidate. The screening work showed a relatively high probability for a discovery for some of the fault blocks within the PL507, but volumes were regarded as too low. The prospectivity in the license has not been updated since Statoil entered the license as the Operator in 2016, and the volumes and risk showed below in Table 4-1 and Figure 4-1 is a result of evaluations done by the previous operator Tullow.

Prospect/ Lead/ Discovery	Reservoir interval	HC type	In Licence (%)	Probability of Disc. (%)	Unrisked res. o.e. 10 ⁶ Sm ³ MMBOE		Depth (m) to prosp. wd.	
Tetrao	Brent Gp.	Oil	100	13	3	18	2950	110
Rangifer	Brent Gp	Oil	100	20	3	18	4200	113
Cervus	Hermod Fm.	Oil	100	25	2,4	15	2159	113
Lemmus	Hermod Fm.	Oil	100	25	1,3	8	2159	113
Vulpus	Hermod Fm.	Oil	100	13	4	25	2142	113
Lepus	Hermod Fm.	Oil	100	13	6	40	2125	110
Elanus	Brent Gp.	Oil	100	25	5,7	35,8	2930	110
Pandion	Brent Gp.	Oil	100	30	1,7	10,5	3040	110
Lynx	Frigg Fm.	Gas	70	25	1,5	10	1974	110



Our reference AU- EXP NUKE NS-00090 Your reference

Statoil Petroleum AS

5 of 5



Figure 4-1 Outlines of prospects and leads within PL507

5 Technical evaluations

No updated technical evaluation has been performed, volumes and risk remains the same.

6 Conclusions

The identified prospects and leads in the PL507 show too low risked recoverable volumes in order to support further drilling and the license is consequently dropped.