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Licence Relinquishment Report PL 739S

Reference is made to the letter sent to MPE dated 2016-12-22, regarding the expiry of the production licence 739S.

This report outlines the key license history, the database, prospects and the technical evaluation of the production license 739S (PL739S) and fulfills the requirement by the NPD for a license status report within 3 months of relinquishment.

1 Key licence history

The PL739S license is located within block 31/10, 31/11 and block 26/1 in the Stord Basin in the North- Central North Sea area. The license was awarded in the APA 2013 licensing round and includes all stratigraphic levels above Base Cretaceous. The CGG Horda broadband survey was delivered in December 2014 (fast track), with final processed full stack data and angle stacks received in January 2016. The seismic survey fulfilled the work commitment for PL739S. The initial period for PL739S expired on the 7th of February 2017, by which time a drill or drop decision had to be taken.

The distribution of PL739S license shares was:

- Statoil Petroleum AS, Operator 50 %
- Petoro 30 %
- Petrolia NOCO AS 20 %

The license is located on the western of the Stord basin, south of the Horda Platform (Figure 1). The area has been evaluated on all relevant seismic surveys. The Black Beauty prospect was the main target in the APA application. Initial reservoir model for Black Beauty was a large slumped/reworked chalk body in the lowermost Paleocene. Possible additional opportunity was identified in the Mallorca Eocene sandstone lead. The Black Beauty prospect and Mallorca lead have been evaluated and QC'ed on fast track data in 2015 and reviewed on the final full stack and angle stacks data in 2016.

Work program – Phase 1

Work obligations and Decisions	Expiry date
Procure 3D seismic data	07.02.2017
Study of geology and geophysics	07.02.2017
Decision to drill or relinquish	07.02.2017

The following Management and Exploration committee meetings have been held in the license:

- EC/MC meeting - 04.10.2016
- EC/MC meeting - 19.05.2016
- EC/MC meeting - 16.11.2015

Our date Our reference
2017-01-26 AU- EXP NUKE ANS-00030
Your date Your reference

- EC/MC meeting - 18.05.2014
- EC/MC meeting - 10.11.2014
- EC/MC meeting - 03.04.2014

In addition the following work meeting has been arranged in the license:

- EC work meeting – 22.09.2015

2 Database

The PL739S common seismic database consists of several 3D datasets (shown in figure 1): CGG14003 (within the PL739S licence boundaries), EN0101R02 and RS1001. The primary seismic dataset CGG14003 is acquired with broadband configuration and consists of full offset PSTM data as well as angle stacks and angle gathers.

Key wells are 25/3-1, 25/6-1, 25/6-2, 25/6-3, 26/4-1, 26/4-2, 30/11-5, 31/8-1 and 31/10-1.

3 Review of geological framework

Statoil Petroleum AS previously held acreage in blocks 26/2 and 31/11 (PL461, 2008-10). Focus in this period was on Jurassic and pre-Jurassic play models. The application securing the PL739S license in 2014 focused on new concepts and ideas relating to the late Cretaceous to early Paleocene age Shetland Group chalk play and a new Eocene age sandstone play in the western Stord Basin. Both play concepts was worked up using all of the then available well and seismic data, including Well 26/5-1 from 2013. The purpose of the application was to secure acreage down to Base Cretaceous unconformity and to test these new play concepts. Since the license application in 2013 one well has been drilled in the area. The 31/10-1 Lupus well is located directly west of the Black Beauty prospect. The well was drilled in July 2014 down to Shetland Gp, and tested the hydrocarbon potential in Palaeocene sands. The wells were reported dry and no shows have been documented in the well. No other wells have been drilled in the blocks represented in the PL739S license.

The studies performed in Phase 1 of the work program concentrated on maturation of the Black Beauty prospect and maturation of the Mallorca lead to prospect. The results of the studies improved understanding of the opportunities and provided support for volumetric input parameters and risk assessment.

In detail, the studies completed for PL739S were the following

- Mapping of Black Beauty and Mallorca on fast track cube, full stack and offset data
- Score seismic modelling
- Seismic amplitude study
- AVO modelling
- LFP study
- CSEM feasibility study
- Regional chalk study
- Geomorphology study Black Beauty
- Geochemistry study 31/10-1

Our date Our reference
2017-01-26 AU- EXP NUKE ANS-00030
Your date Your reference

- Basin Modelling
- Source rock mapping
- Gas chimney study
- Migration study
- Prospect Evaluation

For the Black Beauty the following studies were performed:

- Volume calculations and risk estimation
- Technical economical evaluation

4 **Prospect update**

The Black Beauty prospect was the main target in the APA application. Initial reservoir model for Black Beauty was a large slumped/reworked chalk body in the lowermost Paleocene. An alternative model is a Paleocene sandstone fed from the Norwegian mainland (Ty analogue). Both scenarios were weighted 50/50. The prospect is a stratigraphic trap with a >15 km lateral pinch-out.

Main risk is considered to be migration (0.2), where migration from Viking graben and the Upper Jurassic Draupne Formation is necessary. Although the recoverable resources are fairly high with mean calculated volumes of 53 MSm³ reserves, the Pg is low at Pg = 0.03.

The existing migration model for Black Beauty displays a migration route from Oseberg South, where oil shows in the Shetland Gp. are present below spill. The model requires 20 km lateral migration in Shetland carrier beds which is considered very high risk. A new potential source present locally in the Stord basin has been evaluated in an effort to de-risk migration in the Stord Basin. A 3D regional model developed in Statoil in 2014 indicates an early mature Upper Jurassic Draupne source kitchen in the Stord basin, but the total expelled volumes are limited and would not be sufficient to fill the Black Beauty prospect. Therefore, this source has not been included in the Black Beauty prospect evaluation. Trap seal is also considered high risk, as the the prospect depends on a stratigraphic trap with a 10 km lateral updip seal.

The Mallorca lead was additional prospectivity within the license area in the APA application. The reservoir interval is middle Eocene age sandstone. The sandstones are interpreted to be sand-prone submarine or channel complex deposited in a lower slope or basin floor setting fed from the East. The trap is stratigraphic with seal provided by Eocene shales. The updip outline of Mallorca was previously interpreted on 2D-lines and an updip pinch-out line could not be mapped out with confidence. The initial chance of discovery was low with Pg = 0.058. Trap seal and migration risk were considered main risks. A review of Mallorca on the new CGG broadband survey did reveal a lack of closure in the license updip to the East. No DFI could be observed to de-riks the lead.

Technical evaluations

A business case based on a new field development for a discovery in the sand-case for Black Beauty has been performed during the license period. The chalk case is viewed as uneconomic as a development will require more wells and have a lower recovery factor. Thus the chance of commercial success in Black Beauty is much lower than the Pg and further

Our date
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Our reference
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Your reference

supports a drop decision due to the low likelihood of this occurring. No new technical economical evaluation has been performed on the Mallorca lead.

5 Conclusions

The work programme for PL739S has been fulfilled. The CGG Horda boadband survey was acquired and delivered in 2014. The prospect Black Beauty and the Mallorca lead have been evaluated within the specified time frame and geological and geophysical studies have been completed.

The Black Beauty prospect has a relatively high volume potential and lies in the vicinity of a major Statoil hub. Thus this is a large opportunity that the license needed to evaluate. However, after a full evaluation the license recommends to drop due to the very low chance of commercial success. The PL739S Management Committee has therefore decided to allow the license to expire on 7th of February 2017.

Kind regards
Jim Daniels
PL739S MC Chairman.

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6 FIGURES

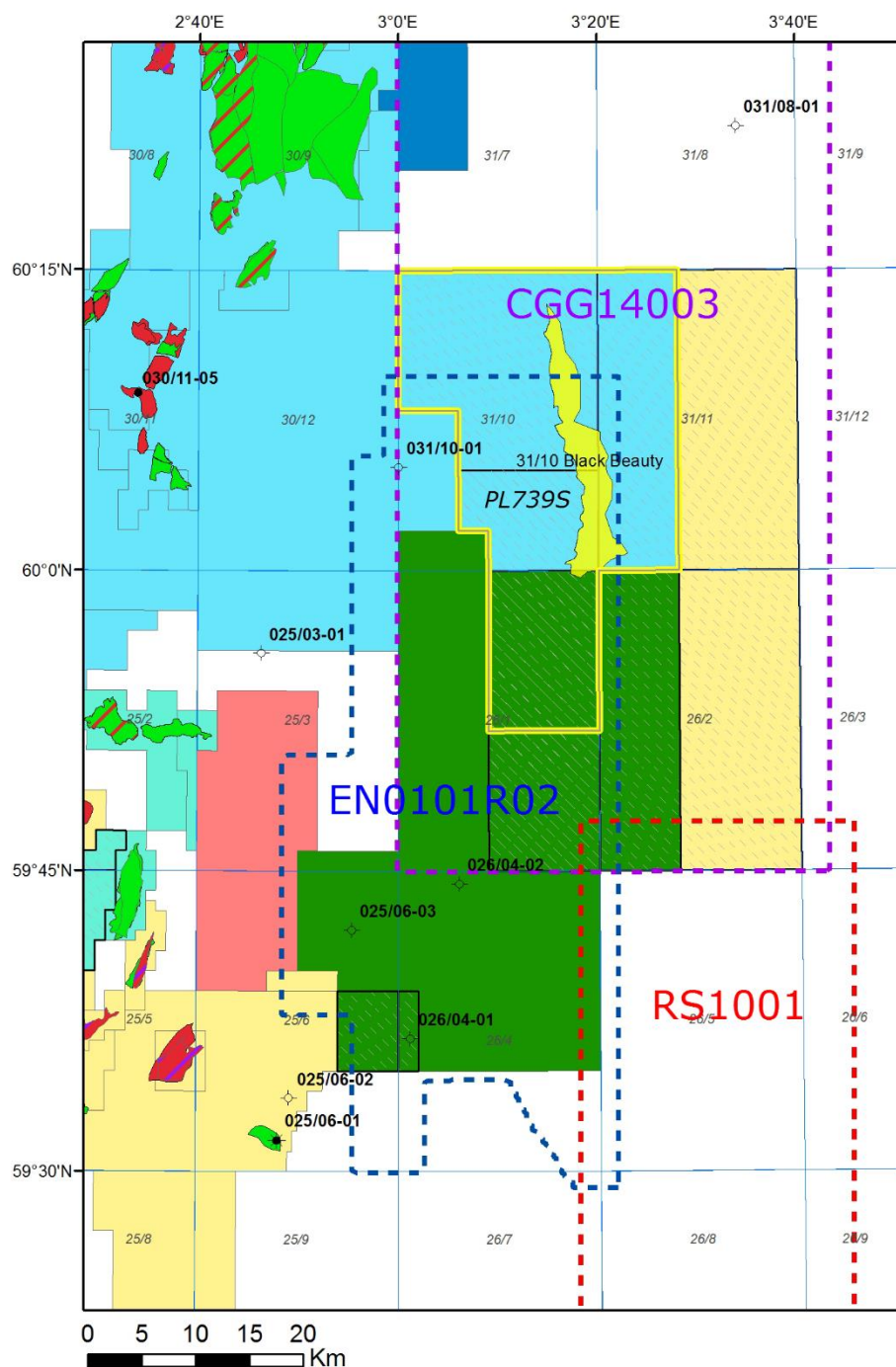


Figure 1. License overview map with discoveries, key wells, prospect outline (yellow polygon), seismic surveys and PL739S license area (yellow outline).