Relinquishment Report for Licenses PL505 & PL505BS

Prepared by	[redacted]
Reviewed by	
Approved by	

MAERSK OIL

Contents

1 OVERVIEW

1.1 Location

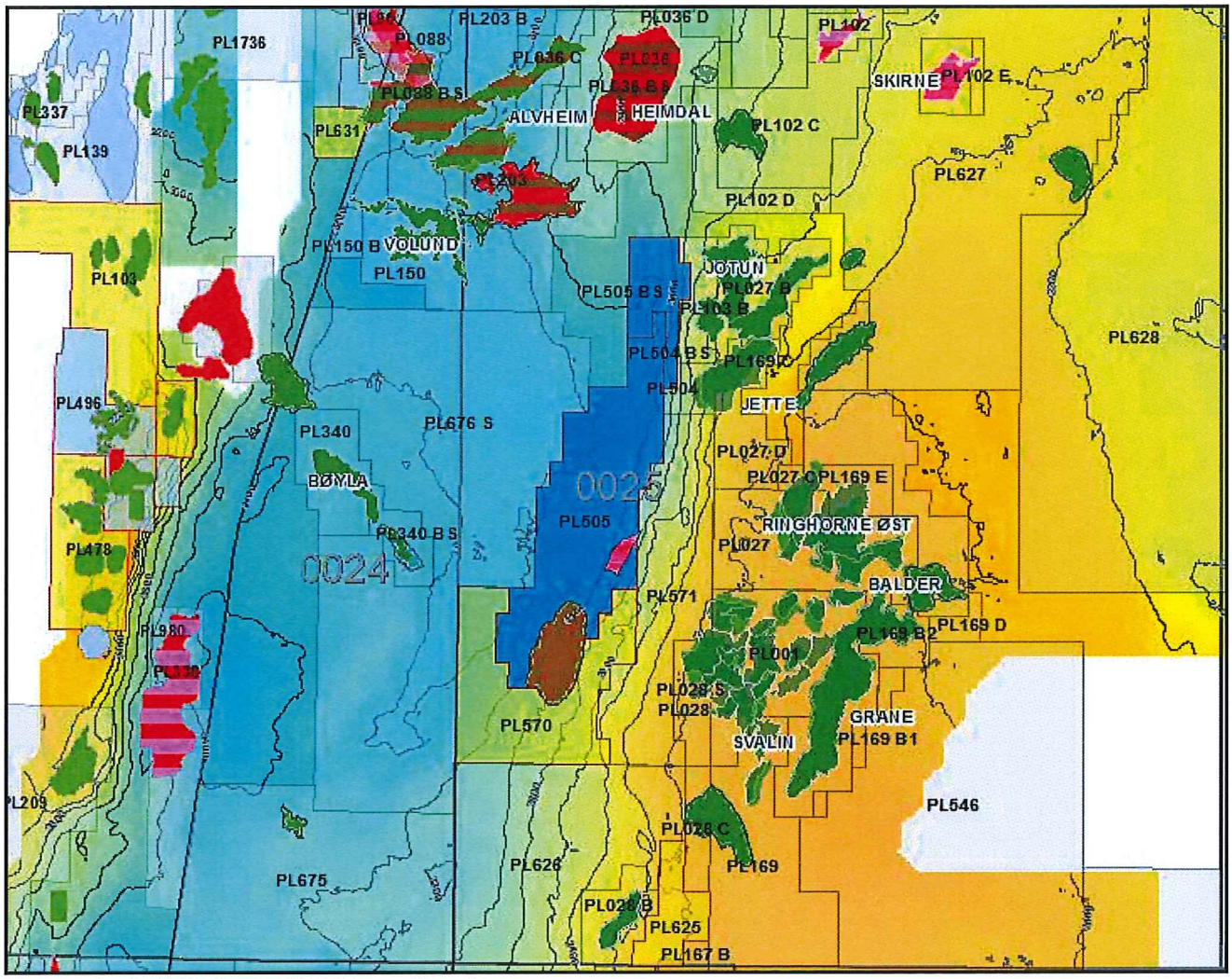

Figure 1: PL505 & PL505BS Location Map

Production Licenses PL505 and PL505BS are located in Blocks 25/7 and 25/10 on the northwestern flank of the Utsira High (see Figure 1). The licenses are located west of the Balder/Ringhorne-field, South of Alvheim/Alvheim/Volund-fields and East of the Bøyla/Caterpillar-discovery. Two exploration wells have been drilled within license PL505; wellbores 25/7-2 and 25/10-11T2 (Earb South). Both wells have been classified as technical discoveries with immovable hydrocarbons in tight Lower and Middle Jurassic reservoirs.

1.2 License history

Licenses PL505 and PL505BS, awarded in 2009 and 2010, were originally operated by Marathon Oil Norway AS. Marathon Oil Norway AS exited the licenses on 28.06.2013 and Maersk Oil Norway AS assumed operatorship. Marathon Oil Norway AS's share was split between Maersk Oil Norway AS and Lundin Norway AS (see Table 1 and Table 2). The remaining licensees Maersk Oil Norway AS, Lundin Norway AS and VNG Norge AS agreed to re-evaluate all potential leads before the drill-or-drop decision to be made by 23.10.2013.

Date valid from	Date valid to	Company longname	Interest [%]
28.06.2013	23.10.2013	Maersk Oil Norway AS Lundin Norway AS VNG Norge AS	40,0 40,0 20,0
27.06.2013	28.06.2013	Maersk Oil Norway AS Lundin Norway AS VNG Norge AS Marathon Oil Norway AS	40,0 30,0 20,0 10,0
04.07.2011	27.06.2013	Marathon Oil Norway AS Lundin Norway AS VNG Norge AS Maersk Oil Norway AS	35,0 30,0 20,0 15,0
26.05.2009	04.07.2011	Marathon Petroleum Norge AS Lundin Norway AS VNG Norge AS	50,0 30,0 20,0
23.01.2009	26.05.2009	Marathon Petroleum Norge AS Lundin Norway AS Endeavour Energy Norge AS	50,0 30,0 20,0

Table 1: License partners and share for PL505 (from NPD's website).

Date valid from	Date valid to	Company longname	Interest [%]
28.06.2013	23.10.2013	Maersk Oil Norway AS Lundin Norway AS VNG Norge AS	40,0 40,0 20,0
27.06.2013	28.06.2013	Maersk Oil Norway AS Lundin Norway AS VNG Norge AS Marathon Oil Norway AS	40,0 30,0 20,0 10,0
04.07.2011	27.06.2013	Marathon Oil Norway AS Lundin Norway AS	35,0 30,0

		VNG Norge AS Maersk Oil Norway AS	20,0 15,0
30.06.2011	04.07.2011	Marathon Petroleum Norge AS Lundin Norway AS VNG Norge AS Maersk Oil Norway AS	35,0 30,0 20,0 15,0
19.02.2010	30.06.2011	Marathon Petroleum Norge AS Lundin Norway AS VNG Norge AS	50,0 30,0 20,0

Table 2: License partners and share for PL505BS (NPD's website).

1.3 Work program

The initial work program for PL505 involved collecting, processing and interpretation of new 3D seismic and one commitment well. The commitment well 25/10-11T2 was drilled in 2012. An additional work program towards a drill-or-drop decision by 23.10.2013 consisted of purchase of newly acquired 3D seismic data.

All work commitments have been fulfilled.

1.4 Common license database

The common well database used for PL505 and PL505BS incorporated all released wells in the area. The common seismic database incorporated several Marathon Oil Norway AS proprietary seismic cubes, but was later changed to only the MC3D-SVG2011/12 after Maersk Oil Norway AS assumed operatorship (see Table 3).

Marathon as operator (2009-2013)	MA05M01	MA06M02	MA09M01	CN2593R1	(CN2593)
Maersk as operator (2013)	MC3D-SVG2011/12				

Table 3: Common seismic database

2 GEOLOGY & GEOPHYSICS

2.1 Geological setting

2.1.1 Pre-drill model

The Brae Trend is a highly successful play on the UK side of the Northern Viking Graben (NVG). In this play sediments eroded off the East Shetland platform deposited as Upper Jurassic submarine fans form the main reservoir. Hydrocarbons subsequently sourced from the Upper Jurassic Shales, are trapped by a combination of hanging-wall, stratigraphic and Cretaceous structural inversion traps (see Figure 2, from Fletcher 2003).

A similar play concept with Upper Jurassic sediments sourced from the Utsira High has been explored on the Norwegian side of the border for several decades.

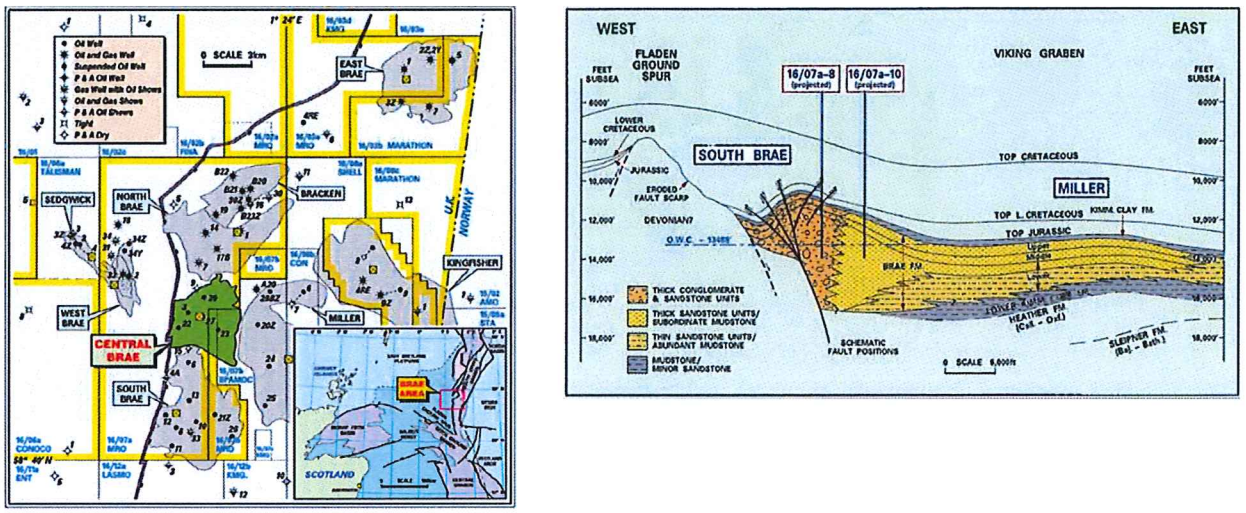

Figure 2: From Fletcher 2003, Brae Trend and Geosection

Working with a "Brae Trend"- model, the PL505 partners mapped what was believed to be an Upper Jurassic section with localized thick deposits in a hanging-wall setting. The well 25/7-2, drilled in 1990 by Conoco Norway Inc., explored the Brae-analogue reservoirs but was interpreted to have only encountered poor quality Upper and Middle Jurassic reservoirs. Based on the mapping done by Marathon Petroleum Norge AS, the wellbore missed the laterally thicker sections (see Figure 3, predrill model). With this potential for Upper Jurassic sand being deposited as

localized sub-marine fans, the partnership decided to fulfill the PL505 license commitment by drilling well 25/10-11 on the "Earb South"-prospect.

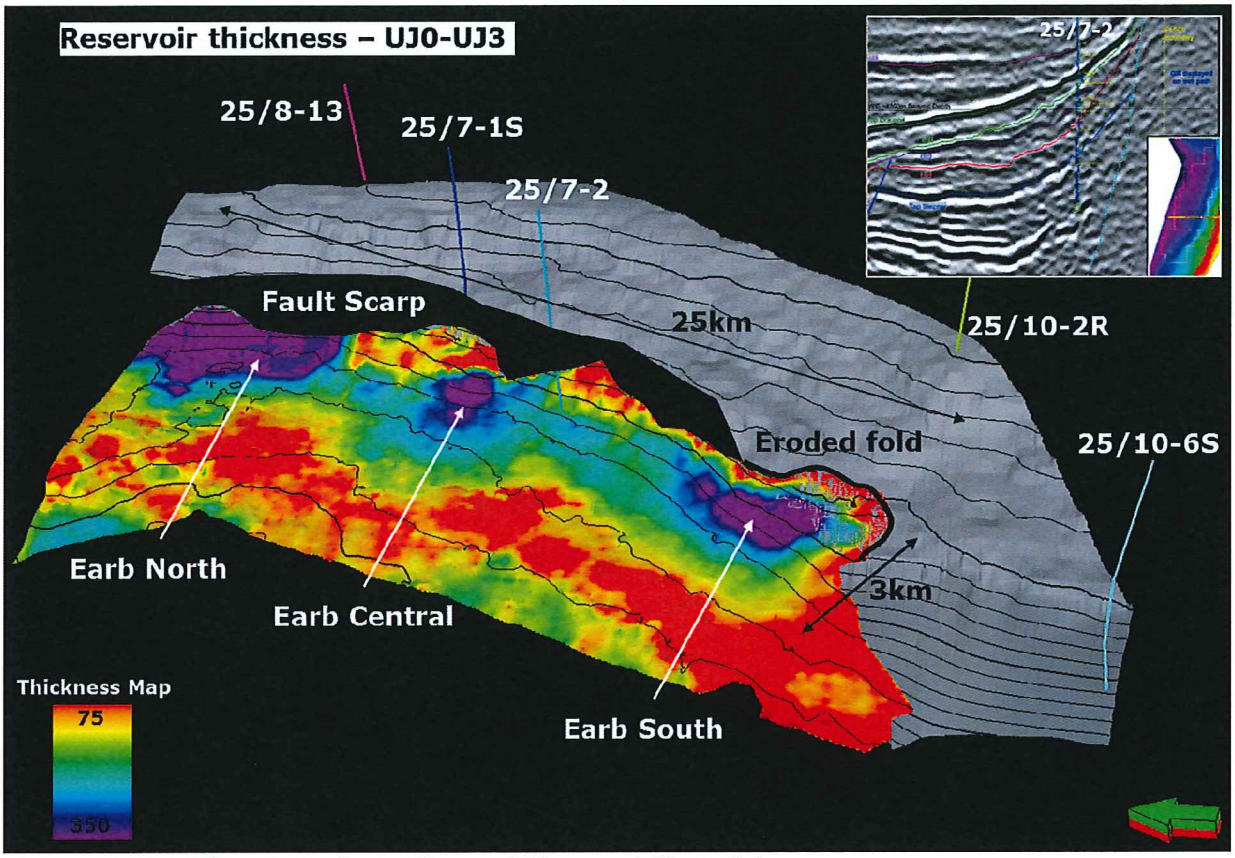

Figure 3: Marathon Petroleum Norge AS's pre-drill model

2.1.2 Well 25/10-11T2

The Exploration well 25/10-11T2 was spudded on 22.02.2011 and completed on 10.08.2011 by License Operator Marathon Petroleum Norge AS. The well was abandoned as a minor discovery with oil and gas in thick but tight, Middle- and Lower Jurassic reservoir rocks. The expected Upper Jurassic reservoir was not encountered. Biostratigraphy indicates repeated sections beneath the Base Cretaceous Unconformity.
A detailed description and interpretation of wellbore 25/10-11T2 has been submitted to the NPD by former Operator Marathon Petroleum Norge AS in the "Earb Discovery Evaluation Report – 25/10-11T2".

2.1.3 Post-drill model

Due to relatively poor seismic quality and high complexity within the tested thick Jurassic section of wellbore 25/10-11T2, several geological models have been postulated. However, with the detailed biostratigraphy from 25/10-11T2 and a new study of 25/7-2, it is clear that the hanging-wall of the fault scarp is tectonically complex. A detailed mapping of the Upper Jurassic Unconformity shows signs of sinuous fault scarps that fit a model of a "fault scarp degradation complex" (see Figure 3). In the hanging-wall a series of large, competent slump blocks have been interpreted in the 25/10-11T2 area and smaller scale slumps in the 25/7-2 area.

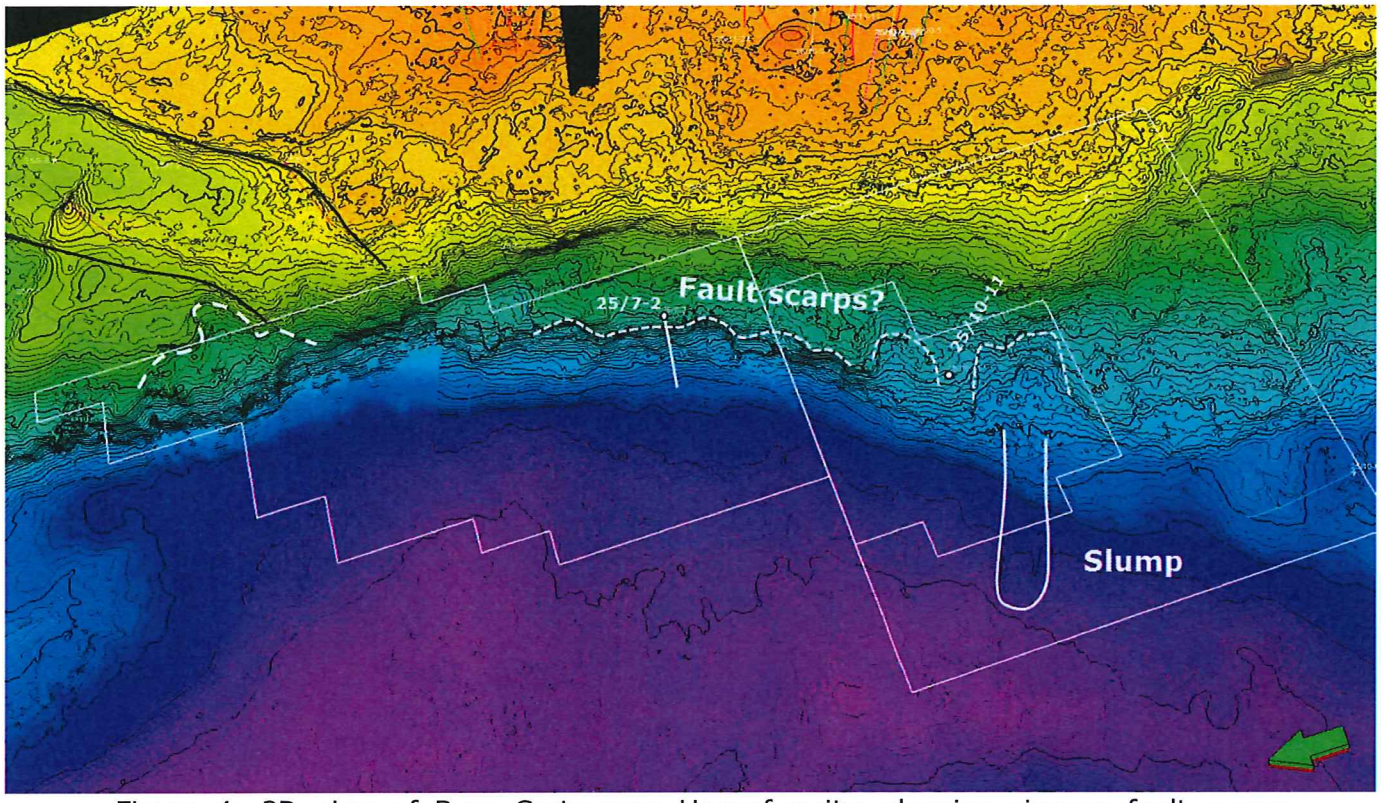

Figure 4: 3D view of Base Cretaceous Unconformity, showing sinuous fault scarps believed to be part of a fault degradation complex.

A similar system has been described for the Statfjord Field by Hesthammer and Fossen (1999). A series of rotated competent blocks can

explain the observations seen both on seismic and by the repeated sections in the well.
According to the new model the Upper Jurassic sands eroded from the Utsira High have been interpreted to have bypassed the license area and been deposited deeper into the South Viking Graben (see figure 5).
The remaining untested prospect "Earb North" has also been interpreted to be part of the same tectonic model and improved reservoir quality compared to "Earb Central" and "Earb South" is highly unlikely.

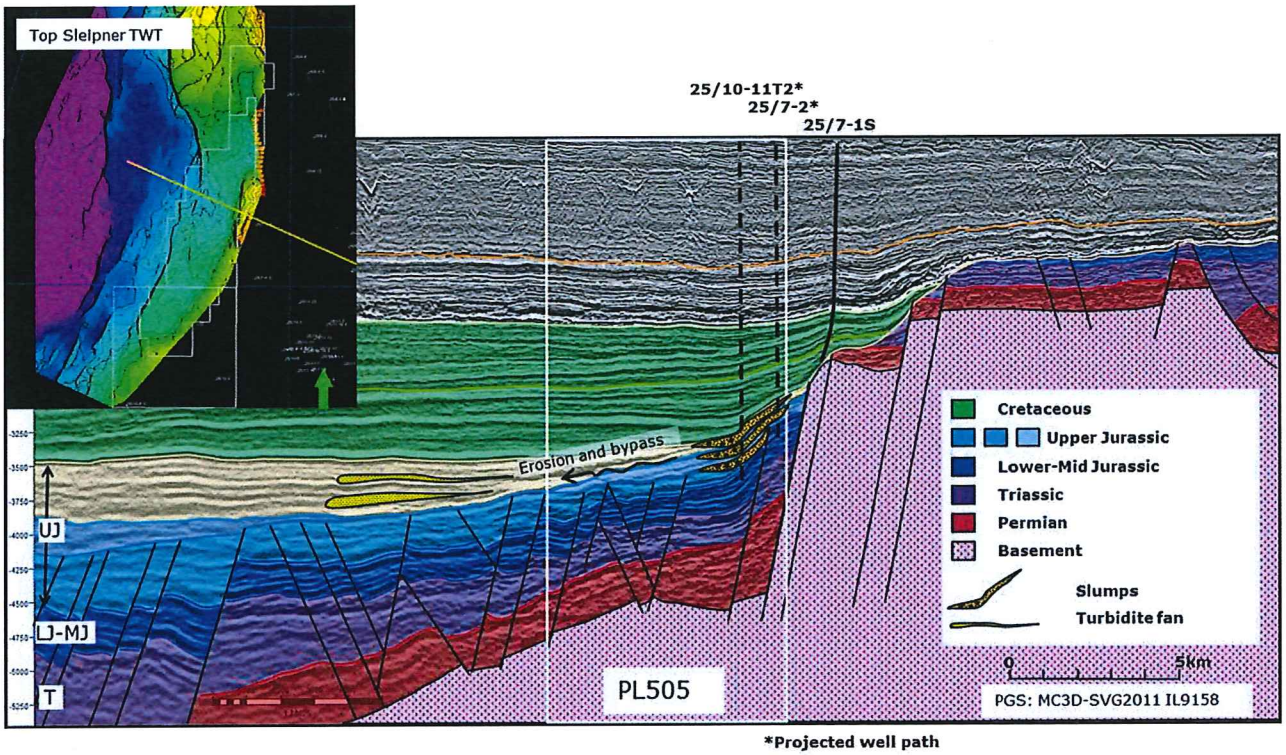

Figure 5: Geosection with Post-drill model

2.2 Technical work

A series of seismic horizons and fault sets have been mapped on the new datasets, to thoroughly evaluate the remaining prospectivity in the licenses. A list of interpreted horizons that have been used to build a complete geological model and prospectivity evaluation can be found in Table 4.

Mapped Seismic Horizons	Fault model	Prospectivity evaluation
Balder Fm.	No	Yes
Heimdal Fm.	No	Yes
Top Chalk	No	No
Base Chalk	No	No
Base Cretaceous Unconformity (BCU)	No	Yes
Upper Jurassic Unconformity 1	No	Yes
Upper Jurassic Unconformity 2	Yes	Yes
Near Top Middle Jurassic (Top Sleipner Fm.)	Yes	No
Top Triassic	Yes	No
Top Basement	Yes	No

Table 4: Mapped horizons, faults and potential plays.

2.3 Prospectivity

In addition to the Upper Jurassic play, a thorough evaluation has been made of the Paleocene- and Lower Cretaceous Plays. A Lower Cretaceous thick has been mapped in the area, but no structural closure has been found.

All the nearby fields and discoveries in this area are established in the Paleocene Play. Both Heimdal Fm and Hermod Fm seismic reflections have been mapped and reservoir quality sands are expected within the licenses. The structural dip at the Top Heimdal (See Figure 6) shows a syncline within the licenses and the structural dip is up towards the West and the East. No viable prospects or leads have been identified within the licensed acreage.

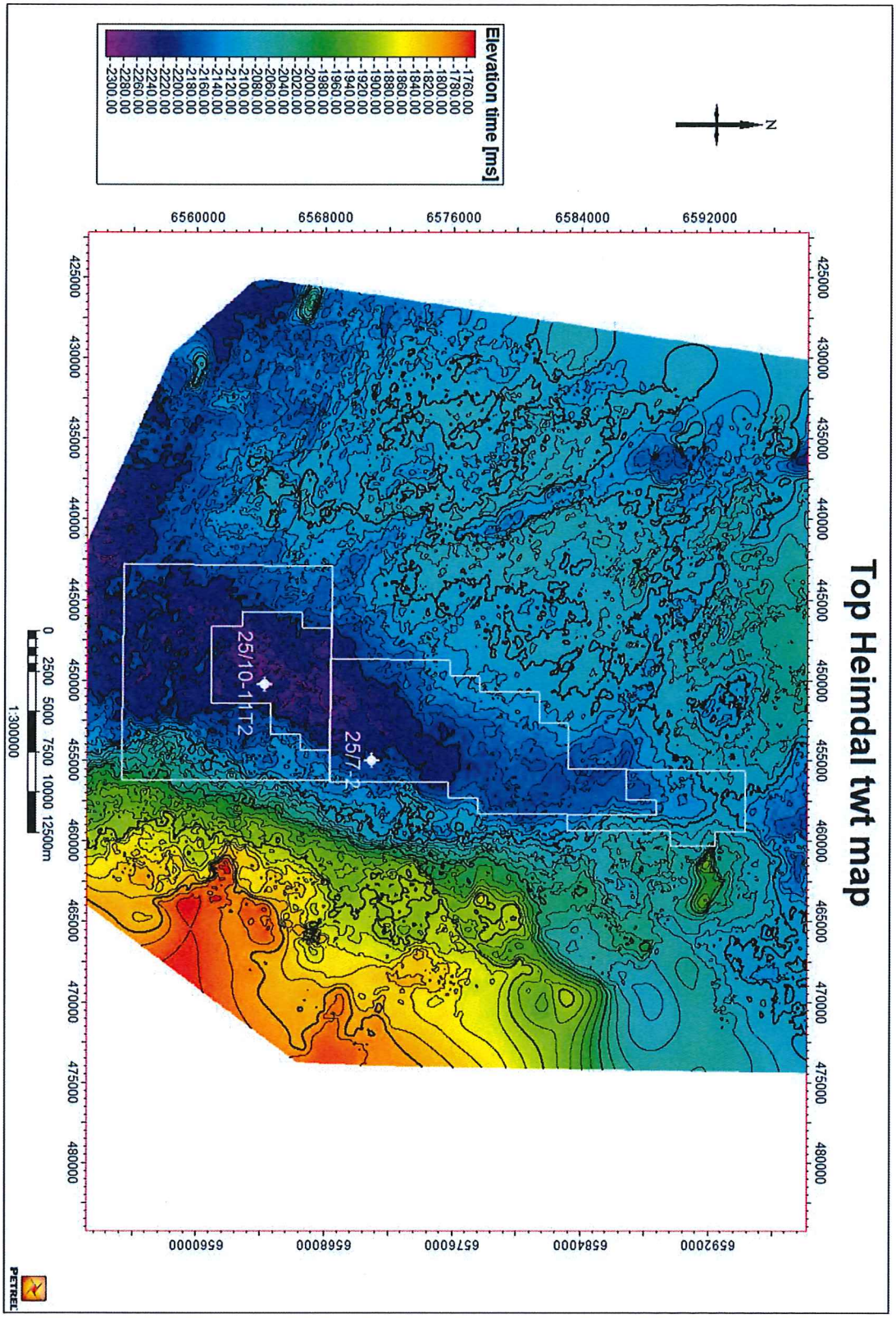

Figure 6: Top Heimdal (twt) map showing a syncline for the Paleocene levels within the licenses.

3 CONCLUSION

3.1 Reason for return of licenses PL505 and PL505BS

Due to the discouraging results of the well 25/10-11T2 and the updated geological model, prospectivity within license PL505 and PL505BS is seen as limited. Maersk Oil Norway AS and partners have therefore decided to drop these licenses. A letter informing Olje- og Energidepartementet about the return of licenses PL505 and PL505BS was sent on 16.10.2013.

4 REFERENCES

-Hesthammer, J. & Fossen, H. 1999: Evolution and geometries of gravitational collapse structures with examples from the Statfjord Field, northern North Sea. Marine and Petroleum Geology 16, 259-281.

-Fletcher, K.J. 2003: The Central Brae Field, Blocks 16/07a, 16/07b, UK North Sea. United Kingdom Oil and Gas Fields, Commemorative Millennium Volume. Geological Society, London, Memoir, 20, 183-190.

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Your ref: 11/1823
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Det Kongelige Olje- og Energidepartement

Attn: Espen Myhra

Dear Mr. Myhra,

Maersk Oil Norway AS, as operator of Production Licenses PL505 & PL505BS, informs the Ministry of the decision to drop licences PL505 & PL505BS.

With reference to your letter dated 11th February 2012, ref. 11/1823, addressed to previous operator Marathon, the deadline for the Drill-or-Drop decision is October 23rd, 2013. The decision to drop is unanimous within the license groups (Maersk Oil Norway AS 40%, Lundin Norway AS 40%, VNG Norge AS 20%).

All other commitments in the licences have been fulfilled:

1. Commitment Well 25/10-11 by 23.01.2012:

The exploration well 25/10-11 in PL505 was drilled in the period 22nd February 2011 until 10th August 2011. The Final Well Report and Discovery Report have been submitted to NPD.
The objective of the exploration well was to prove petroleum in Upper Jurassic reservoir rocks (the Intra Draupne sandstone formation). The well encountered gas condensate in tight Middle and Lower Jurassic reservoir rocks, but did not penetrate any Upper Jurassic reservoir. The gas-condensate-bearing section was tight and not able to flow hydrocarbons.

2. Decision to Purchase 3D Seismic Data by 23.10.2012

The newly acquired seismic data MC3D-SVG2011/NCG2010 have been interpreted in detail to evaluate the remaining prospectivity within PL505 & PL505BS. Main focus was put on the Jurassic interval north of the 25/10-11 and 25/7-2 wells. The Earb North prospect is interpreted to consist of a slump feature similar to what was encountered in the 25/10-11 well, and does as such not appeal as a drillable prospect. A thorough evaluation of the Cretaceous and Tertiary intervals did not result in any drillable prospects.

Yours sincerely,

[redacted]