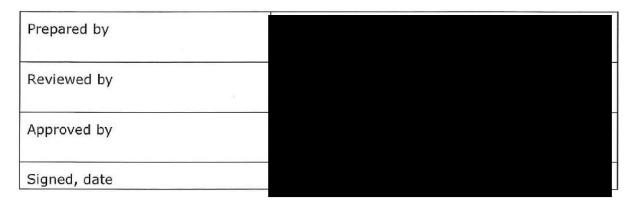


Relinquishment Report for PL732





RELINQUISHMENT REPORT PL732

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KEY LICENCE HISTORY

PL732 was awarded to Maersk Oil (operator with 60%) and Suncor Energy (40%) in February 2014 based on a successful application in the APA 2013 licensing round. Suncor Energy joined Maersk Oil, who had been the sole applicant for the acreage. The licence comprises parts of blocks 7/9 and 8/7 and covers a total of 177km2. It is located on the Sørvestlandet High, approximately 25km northeast of an Upper Jurassic field and discovery trend including Ula, Tambar, Gyda, Krabbe and Butch Main (Figure 1).

With reference to the work obligations in the licence agreement, the licencees have undertaken the following commitments:

- Within 2 years; reprocess 3D seismic, make a drill-or-drop decision.
- Within 4 years; decision to concretize (BoK).
- Within 6 years; decision to continue (BoV).
- Within 7 years; expiry of initial period decide whether to submit a PDO.

The licence has fulfilled the first two-year work commitment, with reprocessing part of the 3D JHUN99 seismic survey. In August 2015 the PL732 partnership applied for a six-month extension of the Drill or Drop decision due to late arrival of the reprocessed seismic data. The extension was granted and the drill or drop decision was set to 7th August 2016. This allowed time for the partnership to evaluate the prospect based on the final reprocessed seismic, which was delivered in January 2016.

Maersk Oil has held regular EC/MC meetings since entering the licence. All meetings are documented on L2S.

At the time of licence application, the Butch Main well 8/10-4S had recently found an oil column of 985m in Ula Fm sandstones, proving the existence of oil accumulations east of the Ula-Gyda fault zone. Post licence award, two appraisal wells were drilled on the Butch structure, testing the eastern and southwest compartment of the Butch structure. Both these wells and one sidetrack were dry, which proved the structure to be compartmentalized with only Butch Main holding hydrocarbons. This knowledge along with focused G&G studies has led to the evaluation of PL732 having limited prospectivity. The original prospect (Bouncer) is now interpreted to consist of several, segmented prospects, none of which are large enough to be economic. The partnership therefore chose to not commit a well. The decision to relinquish PL732 is unanimous within the partnership and the Ministry of Petroleum and Energy was notified of this decision on the 8th July 2016. Approval of the PL732 relinquishment was received in September 2016.



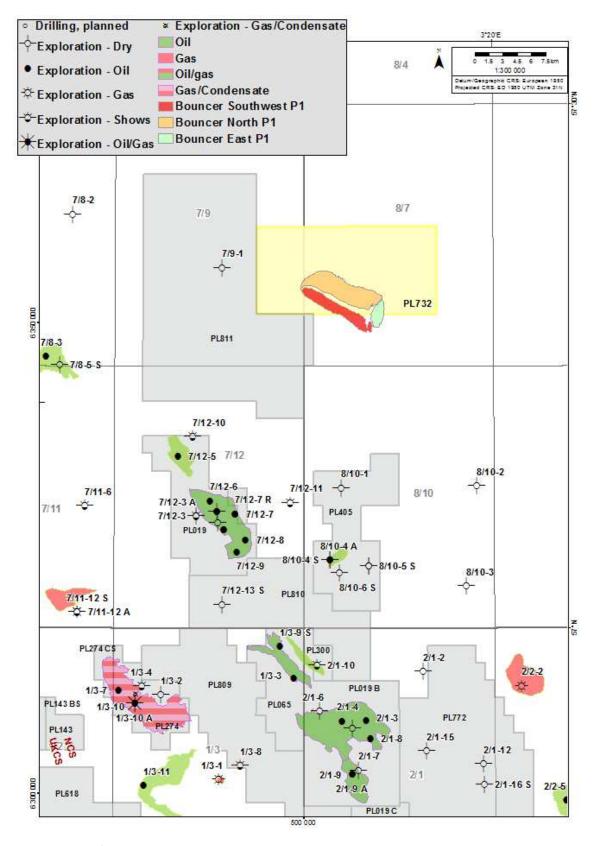


Figure 1 - Licence location map



DATABASE

The wells used for prospect evaluation in PL732 are listed in Table 1 and shown on Figure 2. All wells were available during licence application, apart from the Butch East wells 8/10-5S and -5A which were drilled after the licence was awarded. These wells were traded by the PL732 operator, while partner Suncor is also a partner in the Butch licence PL405, and the wells were used in the prospect evaluation. Petrophysical and biostratigraphic interpretation has also been performed for most wells, as indicated in Table 1.

Table 1 – Well database - key wells used for prospect evaluation.

Well	Drilled Year	TD stratigraphy	Content	Reservoir	Biostrat	СРІ	NPDID
7/8-2	1973	Zechstein Gp	Dry	Vestland Gp	Υ	Υ	294
7/8-3	1983	Zechstein Gp	Oil	Ula Fm	Υ	-	28
7/8-5S	2006	Skagerrak Fm	Dry	Ula Fm	-	Υ	5304
7/9-1	1971	Zechstein Gp	Dry	Ula Fm	Υ	Υ	191
7/12-2	1976	Skagerrak Fm	Oil	Ula Fm, Gassum Fm	Υ	Υ	295
7/12-4	1977	Bryne Fm	Oil	Ula Fm	Υ	Υ	298
7/12-5	1981	Zechstein Gp	Oil	Ula Fm	-	Υ	299
7/12-7	1978	Ula Fm	Oil	Ula Fm	-	Υ	1287
7/12-10	1990	Skagerrak Fm	Shows	Ula Fm	Υ	Υ	1557
7/12-11	1991	Skagerrak Fm	Shows	Ula Fm	Υ	Υ	1787
8/3-2	1982	Skagerrak Fm	Dry	Bryne Fm	Υ	Υ	89
8/5-1	2013	Smith Bank Fm	Dry	-	Υ	-	7112
8/9-1	1976	Zechstein Gp	Dry	Bryne Fm	Υ	Υ	303
8/10-1	1969	Zechstein Gp	Dry	Sandnes Fm	Υ	Υ	166
8/10-2	1980	Zechstein Gp	Dry	Sandnes Fm	Υ	Υ	226
8/10-3	2010	Rotliegendes Gp	Dry	-	Υ	-	6098
8/10-45	2011	Zechstein Gp	Oil	Ula Fm	Υ	Υ	6630
8/10-4A	2011	Skagerrak Fm	Dry	Ula Fm	Υ	Υ	6737
8/10-5S	2014	Zechstein Gp	Dry	Ula Fm	Υ	Υ	7291
8/10-5A	2014	Permian	Dry	Ula Fm	Υ	Υ	7419
8/11-1	1975	Smith Bank Fm	Dry	-	-	Υ	304
8/12-1	1971	Skagerrak Fm	Dry	Sandnes Fm	Υ	Υ	193

Seismic reprocessing of the PGS multi-client seismic survey MC3D-JHUN99 was performed by Schlumberger Geoservices. The reprocessing was performed on a 750km² area covering the licence and nearby area including relevant wells. The final PSTM and PSDM volumes were delivered in January 2016. Prospect interpretation was carried out on the reprocessed data, while the semi-regional interpretation was done on the PGS "Mega Survey" 3D seismic cube from 2013.



Reprocessing with PSDM migration was also performed on eight 2D lines from the TGS Nopec NSR-05/-06 dataset (see table 2). This was done to investigate the impact of longer offsets on the steep flanks of the salt structures. The 2D lines also allowed well ties outside of the 3D survey outline.

Outlines of the seismic data in the common licence database, along with the 2D and 3D reprocessed data outlines are shown in figure 2.

Table 2 - Reprocessed NSR 2D lines.

Survey	Line	Shot point range	NPDID for survey
	22224	1,1000 1,000	1070
NSR-06	22324	14299-15099	4373
NSR-06	41103A	15320-16519	4373
NSR-06	41105	14709-16258	4373
NSR-06	41107A	14493-15720	4373
NSR-06	42323	14116-15217	4373
NSR-06	42327-1	14076-15326	4373
NSR-06	42329	14282-15054	4373
NSR-05	32326	23814-15413	4308



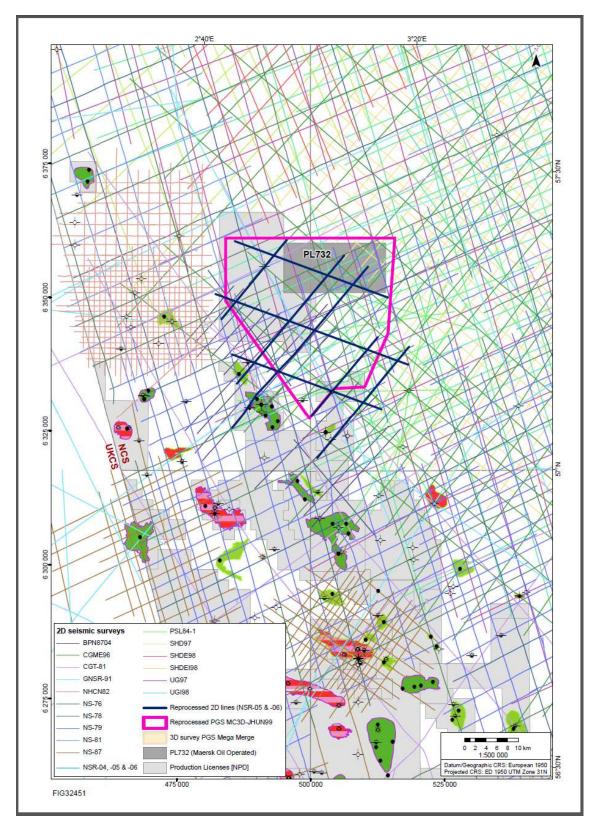


Figure 2 - Seismic database



REVIEW OF GEOLOGICAL AND GEOPHYSICAL STUDIES

The licence partnership has performed a number of internal studies as part of the licence prospectivity evaluation including:

- Detailed seismic interpretation local and regional
- Biostratigraphy study
- Paleogeography study
- Basin modelling and thermal history
- 3D multi-layer migration modelling
- Pressure analysis and seal capacity

An external fluid inclusion study of two key wells was also ordered and purchased from Fluid Inclusion Technologies, Inc.

The final PSTM and PSDM volumes of the reprocessed MC3D-JHUN99 seismic data were delivered in January 2016. The reprocessing gave a considerable uplift in image quality of the structurally complex areas, which improved the confidence in the interpretation of steep reflectors and faults around the salt structures. The original JHUN99 seismic suffered from very strong multiples in the Jurassic and Triassic sections. In the Triassic pod areas, the multiples often had higher amplitude than the primary energy. Considerable effort was put into removing the remnant multiple energy with good results being achieved. This improvement allowed more detailed interpretation of the Triassic and Lower Jurassic section, while also removing some uncertainty in the interpretation of the Upper Jurassic section.

Key horizons were mapped in detail on reprocessed seismic, and merged with regional interpretation. Detailed fault interpretation was carried out on the reprocessed seismic and also on a regional scale. The updated seismic interpretation shows that the Bouncer prospect very likely is divided into (at least) three compartments; Bouncer South (main prospect), Bouncer North, and Bouncer East (figure 3,). No single well can prove volumes in all compartments, hence they are treated as three different prospects. This structure segmentation contributes to decreased volumes compared to what was given in the licence application.



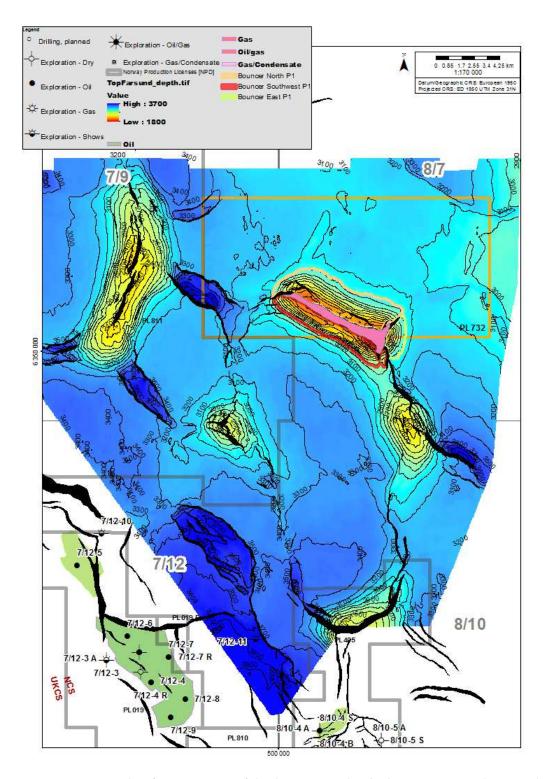


Figure 3 - Top Farsund Fm (near top reservoir) depth map mapped on final PSDM reprocessed seismic, showing the three Bouncer compartments.

The licence operator performed an in-house biostratigraphy study, which allowed for chronostratigraphic correlation of the wider PL732 area. This was integrated with well logs and core



data to produce detailed paleogeographic maps of the J-sequences throughout the Late Jurassic. The paleogeography maps demonstrate that shoreface sands, as found in fields and discoveries to the south-southwest, are unlikely to be present in PL732. The maps show that PL732 was located in a terrestrial setting at the time of shoreface sand deposition in the Ula-Gyda fault zone area. The possibility exists that younger shoreface sands were deposited in the PL732 area, but there is limited well and biostratigraphy data available to constrain this theory. As a result of this study, the risk on reservoir presence and quality was increased compared to the risk accounted for in the application.

A multi-layer 3D petroleum systems model was developed to help quantify charge risk and the development of migration pathways through time. Thermal history basin modelling used in-house regional maps to assess the maturity of local basins and the prolific Central North Sea Graben basin. This showed that the Bouncer prospect would be dependent on long-distance migration from the mature basin in the Central Graben. Possible migration routes were modelled using maps from the reprocessed seismic, fault polygons and facies distribution maps. The results indicated that the only viable migration route is a fill-spill chain from the Ula field, via the Butch segments, and finally northwards through the southern segment of the structure where the northern segment was tested by the dry 8/10-1 well. This route would require a hydrocarbon column at Butch close to 2000m and all segments on Butch to be filled, a fact that has been disproved by the 2014 Butch appraisal wells. A second possible route going northwest from the Ula field was discounted based on the updated GDE maps along with detailed mapping of the underlying pod-interpod structures in the area, which showed that this route was not viable due to a lack of carrier beds. The conclusion from the migration study is that hydrocarbons are unlikely to have reached the Bouncer prospect, as shown on figure 4. This conclusion is supported by the purchased fluid inclusion studies from the two closest wells to PL732, which indicate no shows in the wells. The risk on charge has been increased compared to the risk given in the application.



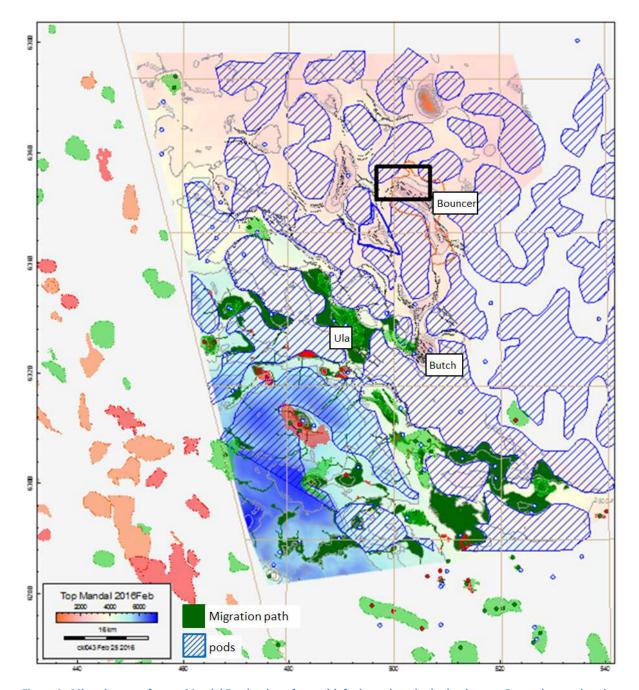


Figure 4 - Migration map for top Mandal Fm depth surface, with faults and carrier bed polygons. Green shows migration paths from the area around Ula field. PL732 outline shown with black square.

Pressure modelling and seal analysis was performed for the greater PL732 area, in order to investigate pressure communication and top seal capacity of the structures. By assuming that the Bouncer prospect follows the same pressure trend as the Butch discovery, it was found that the Bouncer structure could hold a hydrocarbon column of about 800m in the Upper Jurassic reservoir without top seal failure (see figure 5). This is in line with the hydrocarbon column found in the Butch Main discovery.



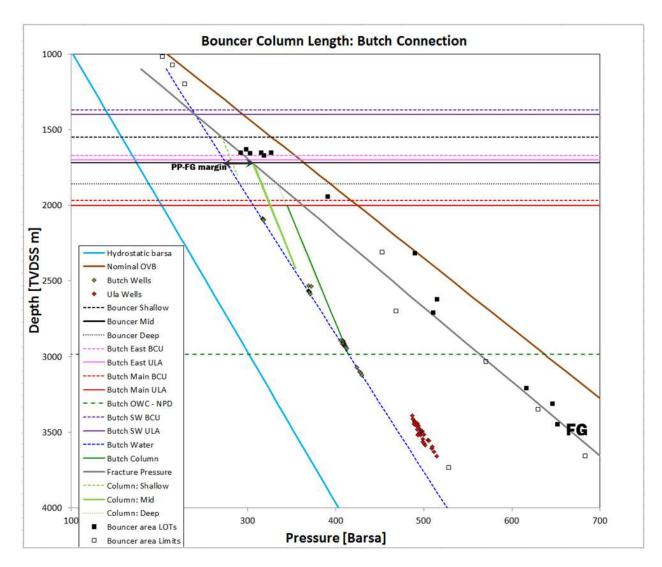


Figure 5 - Results from pressure and seal analysis study. The PP-FG margin at Bouncer crest corresponds to a hydrocarbon column of about 800m.



PROSPECT UPDATE REPORT

The original Bouncer P1 outline stretched around the rim of the entire salt structure located in the PL732 area, and covered an area of about 71 km². Migration was regarded as being the critical risk, and the following Pg and recoverable resource range was given for the Bouncer prospect:

Table 3 - Recoverable resource range and Pg given in licence application, 2013.

P90	Mean	P10	Pg
[mmboe]	[mmboe]	[mmboe]	
5	62	136	0.18

During the work programme the expected prospect volumes have decreased compared to the licence application, due to:

- Compartmentalization of original prospect into three separate segments, decreasing the size and outline of the main prospect.
- PSDM processed seismic indicating a steeper structure with a smaller aerial extent than originally mapped.
- Decreased reservoir thickness as a result of updated paleogeographic maps, which indicated that presence of shoreface sands in PL732 is unlikely.

At the same time the prospect risk has increased, due to:

- Migration model update showing migration to Bouncer as less likely.
- Paleogeographic maps indicating that shoreface sand deposition is less likely than previously modelled.

Prospect maturation work has resulted in the Bouncer structure now being evaluated as a compartmentalized structure. This was seen as a possibility also during the licence application work, but the low quality JHUN99 seismic did not allow for a confident interpretation of the structure. The reprocessed seismic clearly shows salt piercement along the structure crest and large fault displacement along the flanks, confirming the structure to consist of at least three separate compartments. The Bouncer South compartment is now the main prospect, as this is closest to the mature kitchen and most favorably located with regards to any migration to the structure. A seismic line over the Bouncer structure is shown on figure 6.



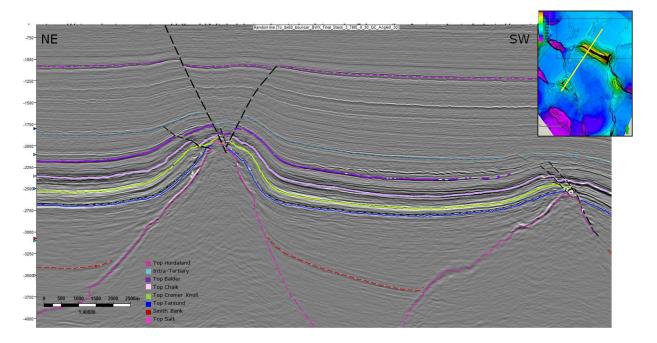


Figure 6 - Seismic line over Bouncer structure, with interpreted horizons and faults. Salt piercement and faulting at the structure's crest are resulting in the segmentation of the structure. Bouncer South and Bouncer North compartments are shown on this line. White = increase in impedance.

The trap at Bouncer South is a 3-way dip closure against salt at the crest, with an area of 8 km². Late Kimmeridgian/Early Volgian (Ula Formation) shoreface sandstones are accounted as the main reservoir, and volume calculations are based on a reservoir of shoreface sand quality. The main prospect risk is charge and migration, with reservoir presence as an additional high risk element. The following updated Pg and recoverable resource range applies for the Bouncer South prospect:

Table 4 - Recoverable resource range and Pg after prospect evaluation, 2016.

P90	Mean	P10	Pg
[mmboe]	[mmboe]	[mmboe]	
1.8	10.8	23.8	0.06

The PL732 partnership regards the remaining potential in the Bouncer prospect as sub-economic and high risk.



TECHNICAL EVALUATIONS

The field development strategy for the Bouncer prospect would be a single subsea template tied in to the Ula field production facilities, which are located about 25 km southwest of Bouncer.

A good analogue for Bouncer is the Butch Main discovery, 25 km south of Bouncer. WoodMac data based on Butch are used for OPEX cost calculations on Bouncer. Key uncertainties for a potential Bouncer development would be the number of wells needed and the tie-in costs to the Ula field. The calculated MEFS based on the recoverable resource range is 20-30 mmboe recoverable, depending on the initial well rate and number of wells needed. Taking the updated volumes into account, the Bouncer South prospect gives a negative probabilistic NPV.

CONCLUSIONS

Since Maersk Oil and Suncor Energy entered the PL732 licence in 2014, the licencees have matured the Bouncer prospect through focused G&G work. The Bouncer prospect has been re-evaluated, and is now considered to be a segmented structure consisting of at least three different compartments. The current main prospect, Bouncer South, is located in the southern compartment. This re-evaluation has decreased the prospect area and recoverable volume range compared to the 2013 evaluation. The prospect also carries significant risk; both in terms of reservoir presence and charge and migration. Pg has decreased from 0.18 to 0.06.

Updated volumes for the Bouncer South prospect shows that the prospect is uneconomic compared to the MEFS. Taking the low Pg for the prospect into consideration, the PL732 partnership has reached a unanimous drop decision for the licence.