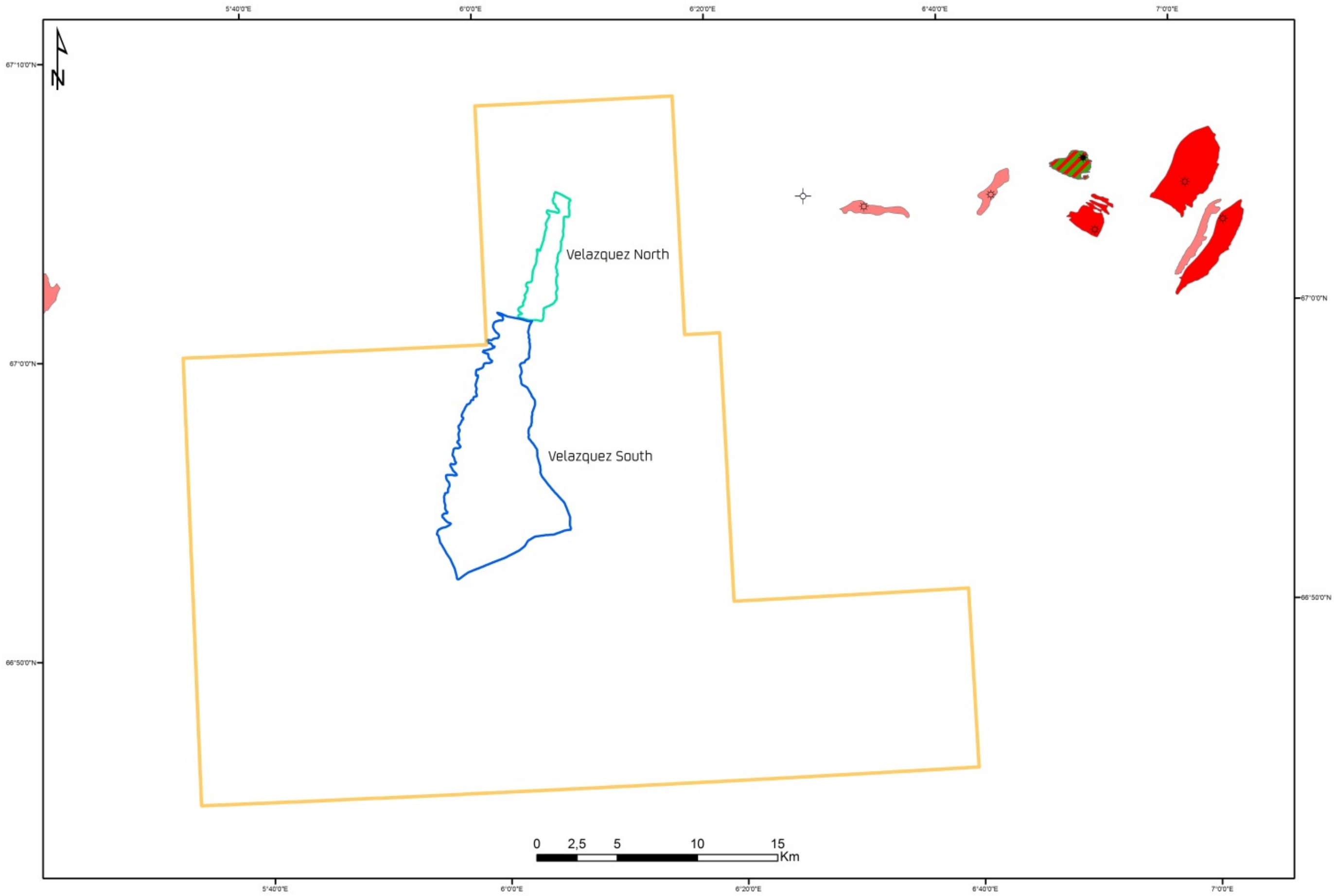
PL801 Status Report



Repsol Norge AS

2018

Table of contents

List of figures

List of tables

1 History of the production licence

PL801 was awarded on February 6th, 2015 as part of the APA 2014 license round to Repsol Exploration Norge AS (50%) as operator, and OMV (Norge) AS (50%) as partner. Repsol Exploration Norge AS changed name to Repsol Norge AS. On December 7th, 2016 the partnership decided to apply for a 1-year extension of the initial period that was approved on February 9th, 2017 by the ministry of petroleum and energy.

Work commitments and time limits

Within 3 years or before February 6th, 2018:

- Perform reprocessing of 3D seismic
- Drill or drop decision

Within 5 years or before February 6th, 2020:

- Drill exploration well
- Concretize (BoK) or drop decision

Within 6 years or before February 6th, 2021:

- Conduct conceptual studies
- Continuation (BoV) or drop decision

Within 7 years or before February 6th, 2022:

- Prepare development plan (PDO)
- Submit PDO or drop decision

Overview of meetings held

- Initial meeting: March 11th, 2015
- EC/MC meeting: November 6th, 2015
- EC/MC meeting: March 16th, 2016
- Work meeting: April 13th, 2016
- EC/MC meeting: November 16th, 2016
- Work meeting: April 21st, 2017
- EC/MC meeting: November 15th, 2017

Grounds for surrender

The license work program was completed by performing reprocessing of 3D seismic. Due to complex geology and the requirement to perform more extensive testing of processing parameters the delivery of final reprocessed data was delayed. As a result, the partnership applied for a 1-year extension of the drill or drop decision. The extension was required to perform a new interpretation of the reprocessed data and mature the prospectivity in the license. Following the extension period, the partnership has integrated the new data and performed a seismic gather quality feasibility/quality enhancement study and completed the PL801 prospectivity evaluation. Following the completion of the work program, the partnership has concluded that no prospect has been identified that can support a positive drilling decision. Based on this, the partnership decided to surrender the production license in its entirety.

2 Database overviews

2.1 Seismic data

The seismic database consists of publicly available 2D datasets, multiclient 2D datasets, publicly available 3D datasets, and multiclient 3D datasets within and surrounding the license area. 1000 km^2 of the multiclient VBT1 3D seismic survey was PreSDM reprocessed as a major part of this evaluation, and the resulting survey was named VBT1CGGR16. All the seismic datasets used in the evaluation of the license are shown in Figure 2.1 and listed in Table 2.1.

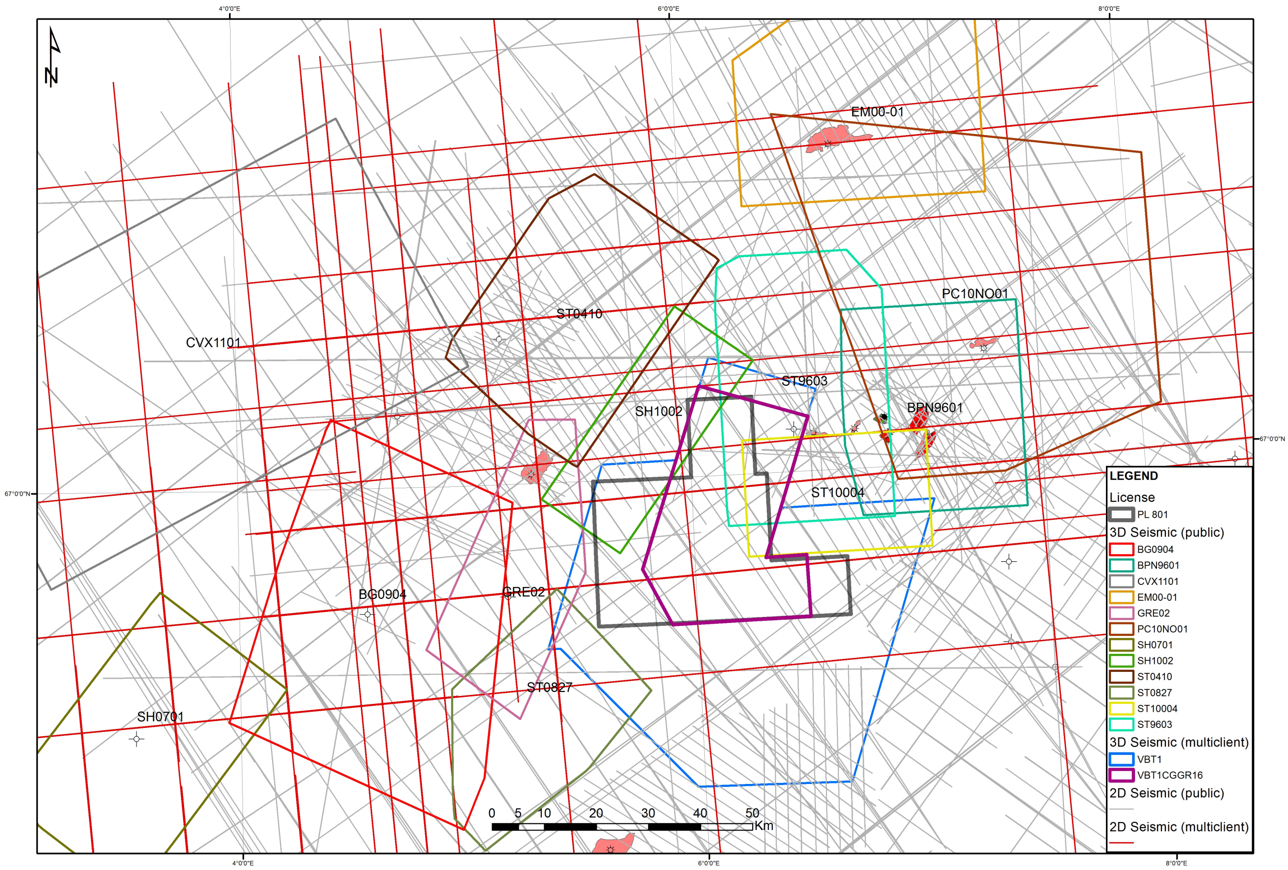


Figure 2.1 Seismic database used in the license

Table 2.1 List of the seismic datasets used in the license

Survey name	Type	Category	Year	NPDID
BG0904	3D	Public	2009	7074
BPN9601	3D	Public	1996	3755
CVX1101	3D	Public	2011	7420
EM00-01	3D	Public	2000	4040
GMNR-94	2D	Public	1994	3650
GRE02	3D	Public	2002	4159
GVN-92	2D	Public	1992	3513
MNR04	2D	Multiclient	2004	4252
MNR05	2D	Multiclient	2005	4298
MNR08	2D	Multiclient	2008	4571
MNR09	2D	Multiclient	2009	7001
NH9706	2D	Public	1997	3863
NPD-MB-88	2D	Public	1988	3143
NPD-ML01-72	2D	Public	1972	2046
NPD-ML-74	2D	Public	1974	2102
NPD-ML-77	2D	Public	1977	2236
NPD-TB-85	2D	Public	1985	2763
NPD-VØ-81	2D	Public	1981	2443
NPD-VØRB-85	2D	Public	1985	2765
NPD-VØRB-86	2D	Public	1986	2866
NPD-VØRB-89	2D	Public	1989	3263
NPD-VØRB-90	2D	Public	1990	3338
NRGS84	2D	Public	1984	2654
PC10NO01	3D	Public	2010	7240
SG9404	2D	Public	1994	3681
SG9604	2D	Public	1996	3806
SG9613	2D	Public	1996	3810
SG9614	2D	Public	1996	3811
SH0701	3D	Public	2007	4477
SH1002	3D	Public	2010	7214
ST0410	3D	Public	2004	4271
ST0827	3D	Public	2008	4614
ST10004	3D	Public	2010	7234
ST8704	2D	Public	1987	3048
ST9603	3D	Public	1996	3830
VBT1	3D	Multiclient	2011	7196
VBT1CGGR16	3D	Multiclient	2016	7196
VBT-94	2D	Public	1994	3701

2.2 Well data

The well database consists of publicly available wellbores. Table 2.2 lists all the wellbores used in the evaluation of the license.

Table 2.2 List of wellbores used in the license

Well name	Year	NPDID	Correlation	Facies analysis	Biostrat	Petro physics	Basin modelling	Seismic calibration	Velocity modelling	Rock physics
6607/5-1	1987	1064	x			x		x		
6607/5-2	1991	1789	x			x	x	x		
6707/10-1	1997	3075	x	x	x	x	x	x	x	
6706/11-1	1998	3202	x	x	x	x	x	x	x	x
6704/12-1	1999	3759	x	x	x	x	x	x	x	x
6706/6-1	2003	4705	x			x	x	x		
6605/8-1	2005	4984	x	x	x	x		x		x
6607/2-1	2007	5471	x	x	x	x	x	x		
6605/8-2	2008	5812	x	x	x	x		x		x
6706/12-1	2008	5867	x	x	x	x		x		
6707/10-2 S	2008	5918	x			x	x	x		
6707/10-2 A	2008	5931	x			x	x	x		
6605/1-1	2009	5979	x	x	x	x	x	x		x
6603/12-1	2009	5985	x			x		x		x
6705/10-1	2009	6044	x	x	x	x	x	x		x
6603/5-1 S	2010	6348	x	x	x	x	x	x		x
6604/10-1	2010	6356	x	x		x		x		x
6604/2-1	2011	6568	x	x		x	x	x	x	x

3 Results from geological and geophysical studies

A number of internal studies were performed to evaluate the prospectivity within the license. Table 3.1 lists all the performed studies used in the license and the results are discussed below.

Table 3.1 List of the performed studies used in the license

Study name	Company	Year
Basin modelling study	Repsol	2015
Structural evolution and restoration study	Repsol	2016
Rock physics and AVO study	Repsol	2016
Velocity modelling evaluation	Repsol	2017
Seismic tuning study	Repsol	2017
Seismic and quanitative interpretation study	Repsol	2017
PreSDM Seismic gather quality feasibility study	Repsol	2017
Petrophysical study	Repsol	2017
Reservoir evaluation	Repsol	2017

Basin modelling study

An in-house 3D basin modelling study was performed. Compared to the SINTEF 2010 study used in the original application the depth-interpretation of BCU was up to several thousand meters different. This study show that the main expulsion period for the Spekk Fm source rock was in the Early to Middle Cretaceous times and mostly cooked out at present-day, while the main expulsion for the Lange Fm source rock was in the Late Cretaceous to Paleogene times and reaching the dry gas window at present-day.

Structural evolution and restoration study

A sequential restoration and backstripping study was performed on a regional seismic section through the Vøring Margin. This study show that the present-day structure in the area is the result of extensional tectonics that took place between Triassic and Paleogene. The area was characterized by Late Jurassic/Early Cretaceous hyperextension, exhumation of mantle material and underplating, followed by passive infill of the accomodation space created during Cretaceous times. Extensional faulting at Late Cretaceous times was related to the opening of the North Atlantic.

Rock physics and AVO study

A semi-regional rock physics study was performed in collaboration with PL802. Specific evaluation towards PL801 performed. The study included LFP (Lithology Fluid Prediction) modelling and AVO (Amplitude Versus Offset) analysis. Good reservoir sandstone is generally soft, but it is important to evaluate surrounding shales as they are important to the acoustic differences observed between sandstones and shales. Modelling shows that sands and potentially gas filled sands should stand out on seismic inversion and gas fill should be evident in AVO analysis. However modelling suggest that there are pitfalls. Water-wet high porosity sandstone can give false AVO (AVO cl. III/II). Fizz gas can generate similar AVO response as high Sg sandstone reservoirs.

Velocity modelling evaluation

Several methods for depth conversion were tested for the license: PreSDM mig vel, PreSDM mig vel smoothed, Vel maps form PreSDM and the FirstGeo HiCube. HiCube puts horizon lower in Ooze area and higher outside Ooze, compared to PreSDM mig vel. Velocity model using the PreSDM mig vel (Vmig) directly gives the best result. Good well tie in the 6706/11-1 (Ægir) well.

Seismic tuning study

The seismic tuning study used a 30Hz Ricker in the modelling. The modelling suggest expected tuning to occur from ~25m sandstone thickness. Seismic survey VBT1CGGR16 PreSDM seems to have somewhat unstable Hz range with peak frequencies from 15-25Hz. At these observed lower frequencies issues with tuning might occur for thicker sandstones.

Seismic and quantitative interpretation study

The seismic has been thoroughly interpreted and evaluated during the license period. A major merge of seismic surveys was performed for better regional understanding. A wide set of reflectors, faults and anomalies have been interpreted in the license and tied to a regional framework. QI (Quantitative Interpretation) performed with extensive use of offset cubes, amplitude products and gathers used in the evaluation.

PreSDM Seismic gather quality feasibility study

The license outcome was reliant on upgrading the seismic quality through seismic PreSDM reprocessing and the ability to use end products for QI/AVO. Since it was clear from the start that seismic quality below the Ooze affected area was a challenge and that the result quality was questionable, an extended PreSDM Seismic gather quality feasibility study was planned for. It was divided in two parts. Part 1 was a feasibility study with focus on seismic gather quality and amplitude analysis/comparison evaluation. Thorough investigation of seismic gathers to evaluate their potential use for AVO and a Q-compensation evaluation study. The result of visual inspection of the gathers, from RMS amplitude analysis and from the non-uniform scaling and Q compensation values applied to the stacks created, reviled that gather and hence seismic cubes are not of sufficient quality to be trusted got reliable QI and to go into an AVO workflow. As a result of this, part 2 of the study including specific oriented LFP and AVO analysis, was cancelled.

Petrophysical study

The petrophysical evaluation of the Maastrichtian Springar Fm was revised based on the updated well tops from the 2016 Geolink study performed in PL802. Compared to the petrophysical evaluation of the Hvithval Mb sandstones in the original application a slightly wider range for the net to gross ratio and porosity values have been estimated for the Upper Springar Fm (IS1-IS3) in this study.

Reservoir evaluation

Compared to the original application the stratigraphical framework from Geolink has been used for the Maastrichtian Springar Fm. The gross depositional maps from the 2016 Geolink study performed in PL802 have been modified based on updated interpretation, seismic attributes and well correlations of the individual sandstone units within the Springar Fm. The results show that the Upper Springar Fm sandstones (IS1-IS3) are sourced from the west and north and deposited in the license area as slope apron fan systems in an upper slope setting (Figure 3.1).

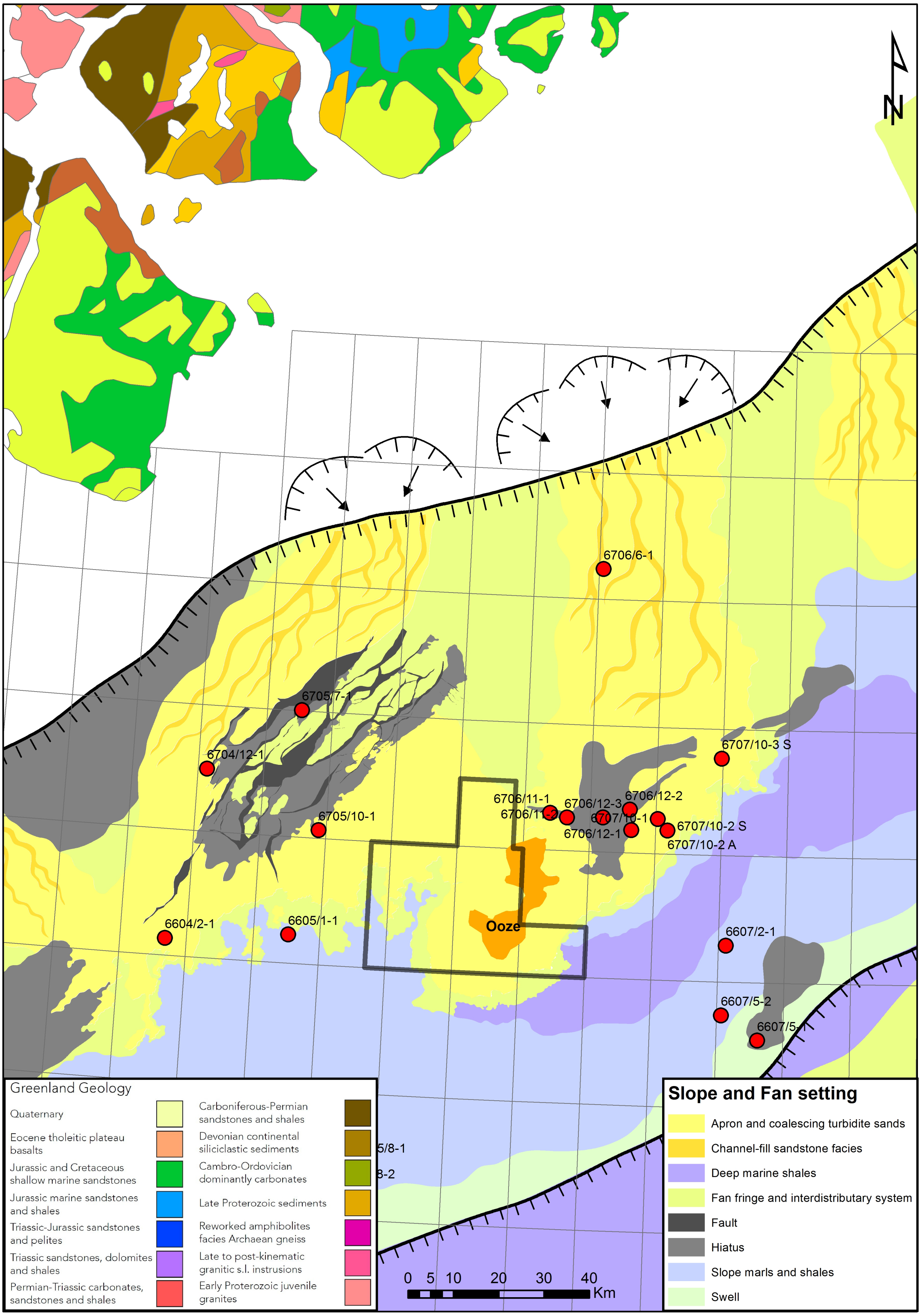


Figure 3.1 Regional facies map of the Upper Springar Fm (IS1-IS3)
Modified after Geolink 2016.

4 Prospect update report

In the original license application three prospects and one lead were identified, all with objectives within the Upper Springar Fm, Hvithval Mb sandstones. The Velazquez prospect was considered the main prospect defined by strong seismic amplitude indicating a stratigraphic trap in the Intra Springar unit1 (IS1), supported by far-offset brightening. The other prospects within the Upper Springar Fm include Goya and Miro, while Picasso was defined as a lead, all with the same trapping style as Velazquez with top seal provided by intra formational shales. The reservoir of the Goya prospect was defined in the Intra Springar unit3 (IS3), Miro prospect in the Intra Springar unit4 (IS4), while the Picasso lead was defined in the Intra Springar unit2 (IS2). The Picasso lead was also seen to extend into PL763. The reservoir quality of the Hvithval Mb sandstones was expected to be good with amalgamated basin-floor fans sourced from the north. The Lange Fm was expected as the main source rock in the area. The migration pathway was expected to be both lateral and vertical, from the Någrind Syncline to the southeast and the Vigrid Syncline to the southwest, through major faults and up the flanks of the Vema Dome. The top seal of the prospects is expected to be inter-bedded shales of the Springar Fm, while the lateral seal was expected to be a combination of normal faulting juxtaposing the intra formational mudstones against the sandstones, sandstone pinch-out and/or facies change towards the flanks of the Vema Dome. The hydrocarbon type was expected to most likely be dry gas with some condensate.

A major part of the work program in the initial period was to perform a pre-stack depth migration (PreSDM) on 1000 km^2 of the VBT1 3D seismic survey, covering the main prospectivity within the license. The Vema Dome overburden consist of vast amounts of siliceous ooze. This is in general not a problem, but when remobilized it creates varying thickness bodies, inter-laminated with other sediments. This again creates sharp QI contrast boundaries. The remobilization also creates very rugged surfaces of the top ooze. The combination of these factors create a high degree of heterogeneity and dispersion of seismic energy, distorting the seismic image below the re-mobilized ooze. This is a problem observed in several areas in the Vøring Basin. Performing a PreSDM trying to resolve these issues was key to be able to de-risk prospects. The prospectivity within the license were highly dependent on reliable QI and AVO analysis for de-risking. Despite the good communication and co+working by CGG and license partners combined, it was not possible to get sufficient seismic quality after the PreSDM pre-processing. Hence the license has not been able to de-risk to drillable prospects.

The work carried out during the extended initial period mainly focused on maturing the Upper Springar Fm prospectivity in the license area. Compared to the prospects and leads presented in the original license application, only two leads remains within the license after the updated evaluation. Velazquez has been split in two and reduced to leads, the Velazquez South lead and the Velazquez North lead respectively. All the identified leads are shown in Figure 4.1 and updated resource volumes and probability estimates are listed in Table 4.1.

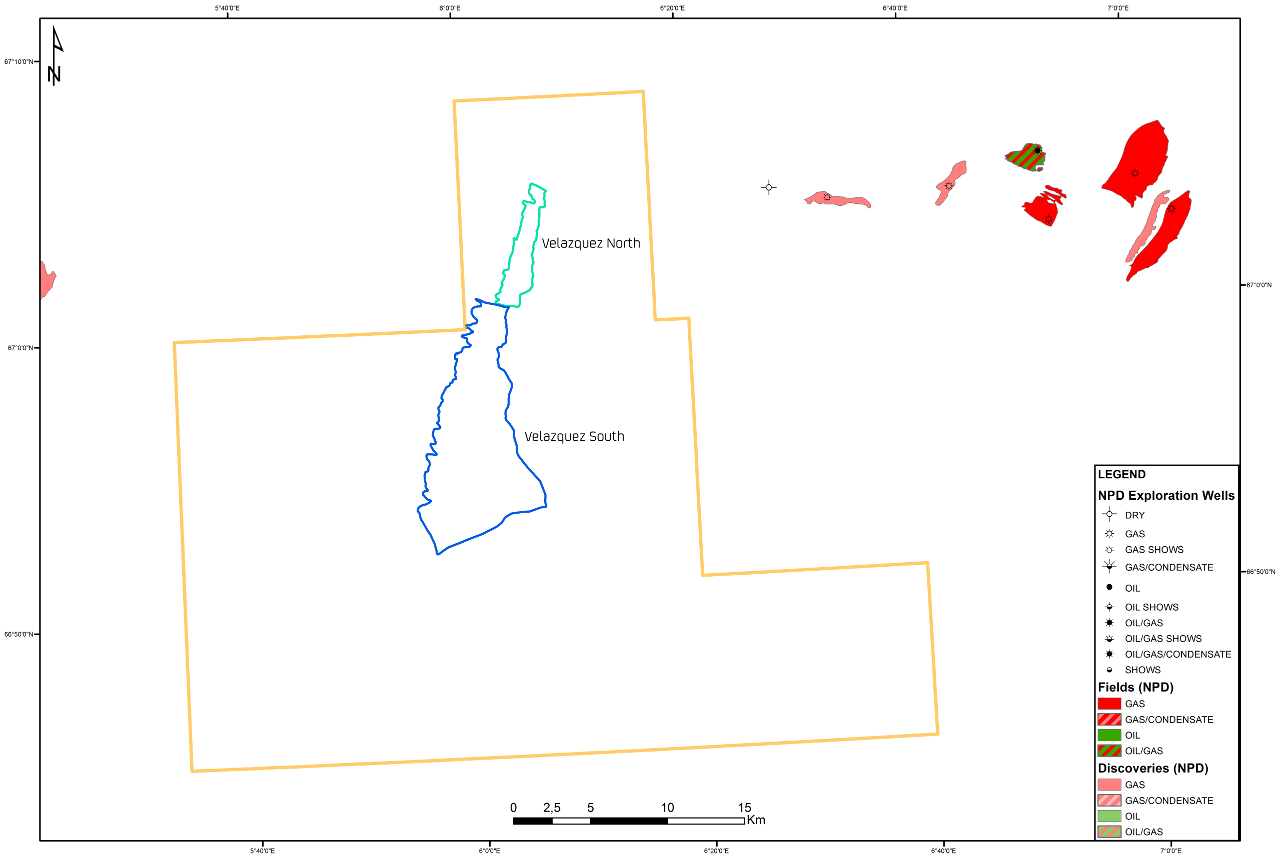


Figure 4.1 Identified leads in the license area
P1 outlines shown.

Table 4.1 List of identified leads in the license area

Prospect name	Reservoir target	Reservoir depth (m)	Geological probability (%)	Gas ($10^9 Sm^3$)			Condensate ($10^6 Sm^3$)		
				P90	Pmean	P10	P90	Pmean	P10
Velazquez South	Springar Formation	2770	10.1	2.93	12.56	28.87	0.08	0.35	0.80
Velazquez North	Springar Formation	2950	10.1	0.45	1.82	3.87	0.01	0.05	0.11

Velazquez South & North leads

The two leads are separated by a normal fault, where the northern part of Velazquez South is down-thrown with respect to Velazquez North. The reservoir consists of Maastrichtian amalgamated turbidite sandstones of the Upper Springar Fm (IS1), sourced from Greenland to the west and northwest of the license area. Figure 4.2 shows the Top Springar Fm depth/ amplitude maps as well as seismic cross-sections through the Velazquez South & North leads. Presence of sandstones within the Upper Springar Fm are strongly indicated by the observed seismic amplitudes. Seismic interpretation provides evidence that the Vema Dome area acted as a depocenter at the time of deposition of the IS1 sandstones. The results from the rock physics and AVO analysis also support sandstone presence outside the ooze affected area. The 6705/10-1 (Asterix) discovery is a good analog for the Upper Springar Fm reservoir in the area, and hence reservoir presence and quality are considered a low risk. The definition of the trap is unclear due to the deterioration of the seismic image in the updip part of the leads below remobilized ooze. Strong efforts have been made in reprocessing the seismic, but the results have been unsatisfactory. A robust trapping mechanism can therefore not be defined and hence trap is considered high risk. Medium risk is attributed to the lateral seal because there is a risk of juxtaposition between the reservoir sandstones of the Velazquez South & North leads and also updip against the Paleocene sandstone observed in the 6706/11-1 (Ægir) well. Source and migration are considered medium to low risk since a clear flat event and gas shows have been observed in the Ægir well and because the lead also has direct access to the expected mature kitchen for the Lange Fm source rock in the Vigrid Syncline. The final geological chance of success is 10.1%. Table 4.2 summarizes the changes in resource volumes and probability estimates for the Velazquez South lead compared to the Velazquez prospect in the original application, while the summary of the Velazquez North lead is shown in Table 4.3.

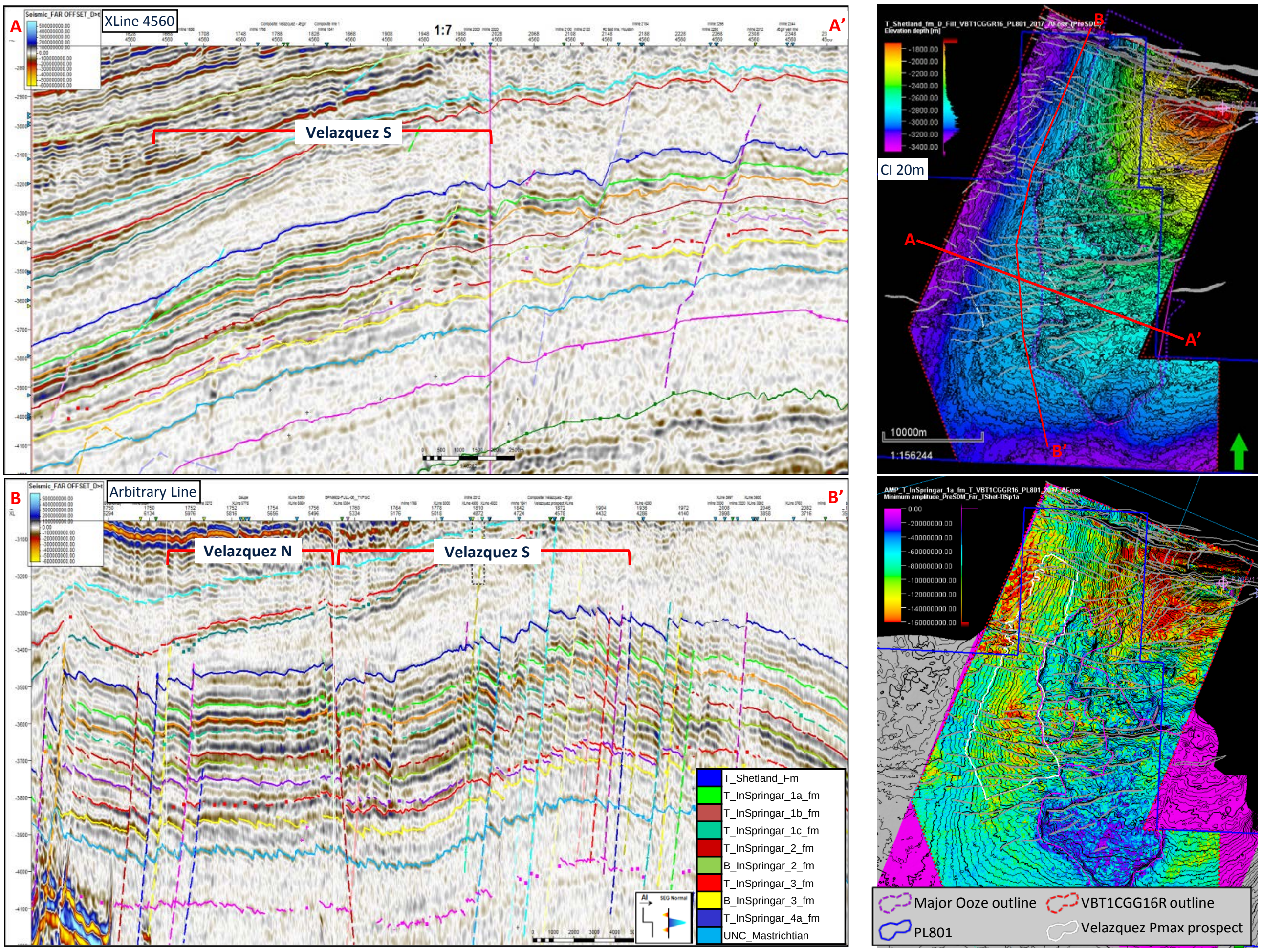


Figure 4.2 Top Springar Fm (IS1) depth/amplitude maps and seismic cross-sections through the Velazquez South & North leads

Table 4.2 Revised prospect data for the Velazquez South lead (NPD's Table 5)
Updated data in the table are highlighted in yellow color.

Table 5: Prospect data (Enclose map)

Block	6706/10, 6605/2&3, 6606	Prospect name	Velazquez South	Discovery/Prosp/Lead	Lead	Prosp ID (or New!)	NPD will insert value	NPD approved (Y/N)	
Play name	NPD will insert value	New Play (Y/N)		Outside play (Y/N)					
Oil, Gas or O&G case:	Gas	Reported by company	Repsol Norge AS	Reference document				Assessment year	2017
This is case no.:	1 of 1	Structural element	Vema Dome	Type of trap	Combination structu	Water depth [m MSL] (>0)	1250	Seismic database (2D/3D)	3D
Resources IN PLACE and RECOVERABLE		**Main phase**				**Associated phase**			
Volumes, this case		Low (P90)	Base, Mode	Base, Mean	High (P10)	Low (P90)	Base, Mode	Base, Mean	High (P10)
In place resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	4.43	7.13	18.78	43.21				
Recoverable resources	Oil [10^6 Sm^3] (>0.00)					0.08	0.13	0.35	0.80
	Gas [10^9 Sm^3] (>0.00)	2.93	4.74	12.56	28.87				
Reservoir Chrono (from)	Maastrichtian	Reservoir litho (from)	Springar Fm.	Source Rock, chrono primary	Cenomanian-Turon	Source Rock, litho primary	Lange Fm.	Seal, Chrono	Maastrichtian
Reservoir Chrono (to)		Reservoir litho (to)		Source Rock, chrono secondary	Oxfordian-Ryazania	Source Rock, litho secondary	Spekk Fm.	Seal, Litho	Springar Fm.
Probability [fraction]									
Technical (oil + gas + oil & gas case) (0.00-1.00)	0.10	Oil case (0.00-1.00)		Gas case (0.00-1.00)	1.00	Oil & Gas case (0.00-1.00)			
Reservoir (P1) (0.00-1.00)	0.90	Trap (P2) (0.00-1.00)	0.40	Charge (P3) (0.00-1.00)	0.56	Retention (P4) (0.00-1.00)	0.50		
Parametres:	Low (P90)	Base	High (P10)	*Comments*					
Depth to top of prospect [m MSL] (> 0)	2770	2770	2770						
Area of closure [km^2] (> 0.0)	5.4	18.3	37.2						
Reservoir thickness [m] (> 0)	70	70	70						
HC column in prospect [m] (> 0)	100	173	260						
Gross rock vol. [10^9 m^3] (> 0.000)	0.194	0.837	1.887						
Net / Gross [fraction] (0.00-1.00)	0.49	0.60	0.70						
Porosity [fraction] (0.00-1.00)	0.21	0.23	0.26						
Permeability [mD] (> 0.0)	100.0	200.0	400.0						
Water Saturation [fraction] (0.00-1.00)	0.40	0.30	0.20						
Bg [Rm3/Sm3] (< 1.0000)	0.0044	0.0042	0.0041						
1/Bo [Sm3/Rm3] (< 1.00)									
GOR, free gas [Sm^3/Sm^3] (> 0)									
GOR, oil [Sm^3/Sm^3] (> 0)									
Recov. factor, oil main phase [fraction] (0.00-1.00)									
Recov. factor, gas ass. phase [fraction] (0.00-1.00)									
Recov. factor, gas main phase [fraction] (0.00-1.00)	0.60	0.70	0.80						
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)	1.00	1.00	1.00	For NPD use:					
Temperature, top res [°C] (>0)	79			Innrapp. av geolog-init:	NPD will insert value	Registrert - init:	NPD will insert value	Kart oppdatert	NPD will insert value
Pressure, top res [bar] (>0)	272			Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	Porosity of 0.1	Vshale of 0.5	3.					Kart nr	NPD will insert value

Table 4.3 Summary of the Velazquez North lead (NPD's Table 5)

Table 5: Prospect data (Enclose map)

Block	6706/10, 6605/2&3, 6606	Prospect name	Velazquez North	Discovery/Prosp/Lead	Lead	Prosp ID (or New!)	NPD will insert value	NPD approved (Y/N)	
Play name	NPD will insert value	New Play (Y/N)		Outside play (Y/N)					
Oil, Gas or O&G case:	Gas	Reported by company	Repsol Norge AS	Reference document				Assessment year	2017
This is case no.:	1 of 1	Structural element	Vema Dome	Type of trap	Combination structu	Water depth [m MSL] (>0)	1250	Seismic database (2D/3D)	3D
Resources IN PLACE and RECOVERABLE		**Main phase**				**Associated phase**			
Volumes, this case		Low (P90)	Base, Mode	Base, Mean	High (P10)	Low (P90)	Base, Mode	Base, Mean	High (P10)
In place resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	0.68	1.24	2.72	5.74				
Recoverable resources	Oil [10^6 Sm^3] (>0.00)					0.01	0.02	0.05	0.11
	Gas [10^9 Sm^3] (>0.00)	0.45	0.84	1.82	3.87				
Reservoir Chrono (from)	Maastrichtian	Reservoir litho (from)	Springar Fm.	Source Rock, chrono primary	Cenomanian-Turon	Source Rock, litho primary	Lange Fm.	Seal, Chrono	Maastrichtian
Reservoir Chrono (to)		Reservoir litho (to)		Source Rock, chrono secondary	Oxfordian-Ryazania	Source Rock, litho secondary	Spekk Fm.	Seal, Litho	Springar Fm.
Probability [fraction]									
Technical (oil + gas + oil & gas case) (0.00-1.00)	0.10	Oil case (0.00-1.00)		Gas case (0.00-1.00)	1.00	Oil & Gas case (0.00-1.00)			
Reservoir (P1) (0.00-1.00)	0.90	Trap (P2) (0.00-1.00)	0.40	Charge (P3) (0.00-1.00)	0.56	Retention (P4) (0.00-1.00)	0.50		
Parametres:	Low (P90)	Base	High (P10)	*Comments*					
Depth to top of prospect [m MSL] (> 0)	2950	2950	2950						
Area of closure [km^2] (> 0.0)	6.7	9.3	10.7						
Reservoir thickness [m] (> 0)	70	70	70						
HC column in prospect [m] (> 0)	40	59	80						
Gross rock vol. [10^9 m^3] (> 0.000)	0.163	0.327	0.489						
Net / Gross [fraction] (0.00-1.00)	0.49	0.60	0.70						
Porosity [fraction] (0.00-1.00)	0.21	0.23	0.26						
Permeability [mD] (> 0.0)	100.0	200.0	400.0						
Water Saturation [fraction] (0.00-1.00)	0.40	0.30	0.20						
Bg [Rm3/Sm3] (< 1.0000)	0.0042	0.0040	0.0039						
1/Bo [Sm3/Rm3] (< 1.00)									
GOR, free gas [Sm^3/Sm^3] (> 0)									
GOR, oil [Sm^3/Sm^3] (> 0)									
Recov. factor, oil main phase [fraction] (0.00-1.00)									
Recov. factor, gas ass. phase [fraction] (0.00-1.00)									
Recov. factor, gas main phase [fraction] (0.00-1.00)	0.60	0.68	0.75						
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)	1.00	1.00	1.00	For NPD use:					
Temperature, top res [°C] (>0)	89			Innrapp. av geolog-init:	NPD will insert value	Registrert - init:	NPD will insert value	Kart oppdatert	NPD will insert value
Pressure, top res [bar] (>0)	289			Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	Porosity of 0.1	Vshale of 0.5	3.					Kart nr	NPD will insert value

5 Technical evaluation

In the original license application, a conceptual development plan with a subsea tieback to the Aasta Hansteen SPAR platform was considered for a discovery in the Velazquez prospect.

Following the completion of the prospectivity evaluation, no prospect has been identified in the license that can be matured to a state that can justify exploration drilling. Based on this, no further technical evaluations have been carried out to determine minimum commercial resource volumes and possible development of the remaining prospectivity in PL801.

6 Conclusion

Two Upper Springar Fm leads were identified within PL801, the Velazquez South & North respectively. The hydrocarbon type in Velazquez South was expected to most likely be dry gas with some condensates with mean recoverable resources of 12.56 billion Sm^3 gas and 0.35 million Sm^3 of condensate respectively. The geological chance of success was 10.1%.

Although the resource estimates of the Velazquez South lead showed a potentially viable economic case, the risk was considered too high and the partnership has not identified any additional work that can be performed to further de-risk the leads within the license. Since no drillable prospect has been identified, the partnership has decided to surrender the production license in its entirety.