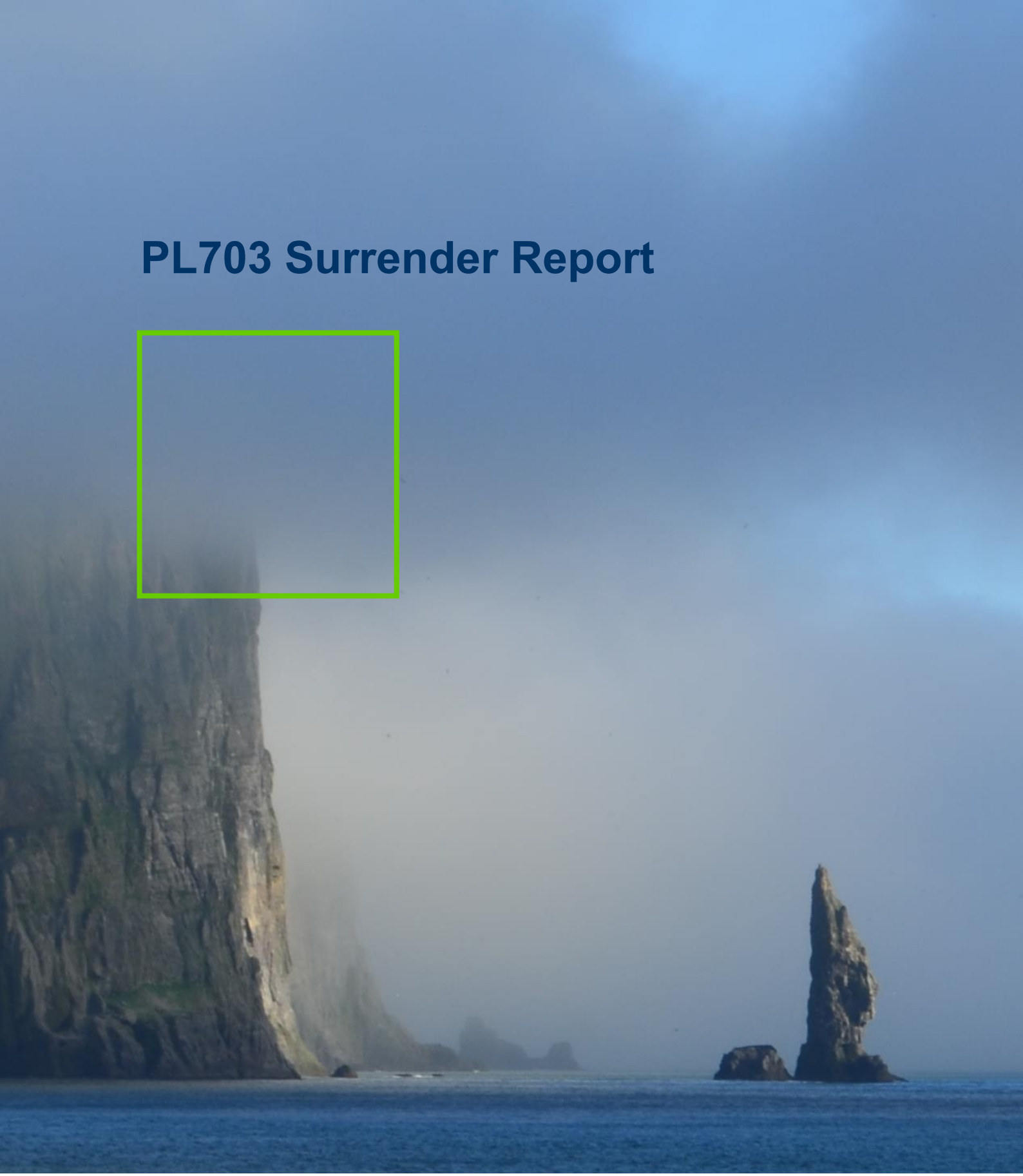
PL703 Surrender Report



OMV (Norge) AS

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1 Key License History

Production License (PL) 703, is located in the Vøring Basin, Norwegian Sea and is comprised of block 6605/1 (Figure 1.1). The license was awarded on June 21st, 2013, as a part of the 22nd Licensing Round. The initial period was valid until 21st June, 2018, this date would receive two separate one year extensions, these extensions were applied for on May 6th, 2014 and June 14th, 2016. The license partnership consisted of OMV (Norge) AS (Operator) and PGNiG Upstream Norway AS. The license interest between the companies was as follows:

- OMV (Norge) AS - 60%
- PGNiG Upstream Norway AS - 40%

The initial work programme to evaluate the license was as follows:

- Phase 1 - Within two years (by June 21st 2015) acquire 3D seismic data within the license and make drill or drop decision. Due to the license extensions, the drill or drop decision was intially extended to June 21st 2016, and later June 21st 2017.
- Phase 2 - Within three years (by June 21st 2018) drill exploration well.

The work programme for the initial phase of the license was fulfilled by the reprocessing and merging seven 3D seismic cubes with a combined total area of 5500 km^2. The area of reprocessing was considerably larger than the license area of ~410 km^2. The decision to reprocess such a large seismic volume was made to gain a regional perspective in prospectivity. The license extensions were granted in order to complete the large regional reprocessing and to fully evaluate the new dataset.

During the lifecycle of PL703 a number of meetings were held between the licensees. A list of these meetings can be found below:

- 11.09.2013 - EC / MC Meeting
- 22.11.2013 - EC / MC Meeting
- 28.01.2014 - EC Work Meeting
- 12.11.2014 - EC / MC Meeting
- 12.06.2015 - EC Work Meeting
- 18.11.2015 - EC / MC Meeting
- 20.04.2016 - EC / MC Meeting
- 30.11.2016 - EC / MC Meeting
- 17.01.2017 - EC Work Meeting
- 24.05.2017 - EC / MC Meeting

The initial phase of the work programme was completed by creating a high quality 3D seismic survey through reprocessing and merging. The Operator has also conducted several G&G studies on behalf of the partnership, including: rock physics modelling, generating acoustic impedance seismic volume, seismic gather conditioning and analysis, seismic modelling through geobody modelling and fluid substitution, and regional pressure analysis. Several attractive prospects were identified and assessed within the license, however, the

volume potential currently recognized within PL703 is not sufficient for a positive drill decision, the license Management Committee has therefore concluded to surrender the license.

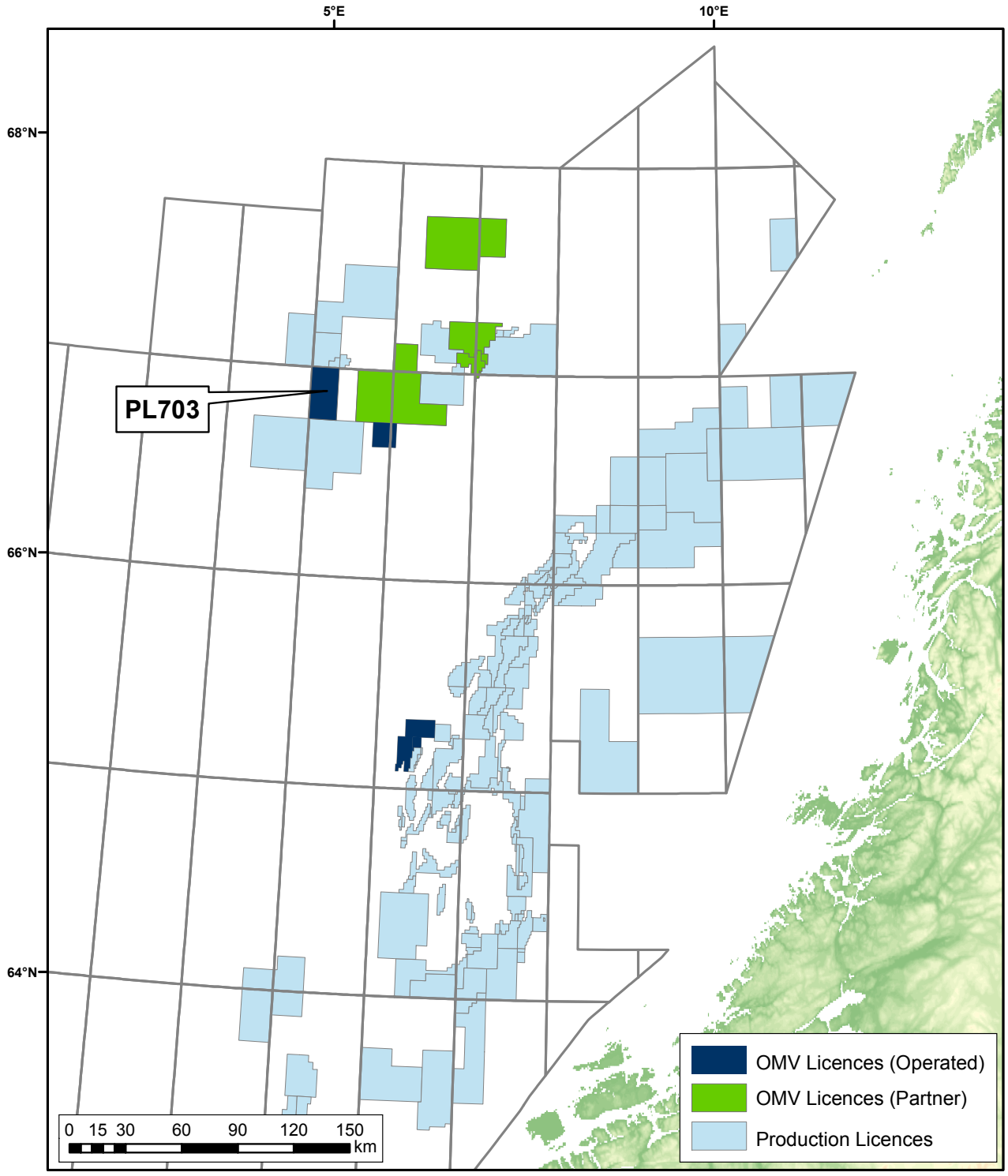

Figure 1.1 Overview Map Norwegian Sea

2 Database

The common database was updated in June 2016 to reflect the reprocessed seismic data as the main seismic cube for the license, the database was also limited to the key survey and wells in order to make any future farm-down activity more attractive. The complete list of seismic cubes in the common database can be found in Table 2.1 and the location of the surveys in Figure 2.1. The key dataset is the reprocessed OMV15M02, the data quality is considered to be excellent. For the license common database the survey was cropped to range from Inline 2450 to 4800, crossline 9300 to 13126, the remaining area is approximately 977 km^2. The underlying 3D seismic surveys were also incorporated into the common database, GRE02 and SG9604.

The well database is summarized in Table 2.2 with the locations in Figure 2.1. Three wells were essential to understand the stratigraphy in the area, in particular 6705/10-1 (Asterix) and 6605/1-1 (Obelix) were key for understanding prospectivity in the license. These wells were key in constraining the geophysical studies carried out in the license such as seismic modelling and AVO analysis.

Table 2.1 Seismic Database

Survey	Survey Input	NPDID	Market Availability	Inline Range	Xline Range	Vintage	Area (km^2)	Quality
OMV15M02	SG9604, GRE02	3806, 4159	License Owned	2450 - 4800	9300 - 13126	2015	~977	Excellent
GRE02	-	4159	Multiclient	3502 - 5116	2300 - 6158	2002	~765	Good
SG9604	-	3806	Company - Statoil	5995 - 13672	3808 - 5497	1996	~507	Fair - Good

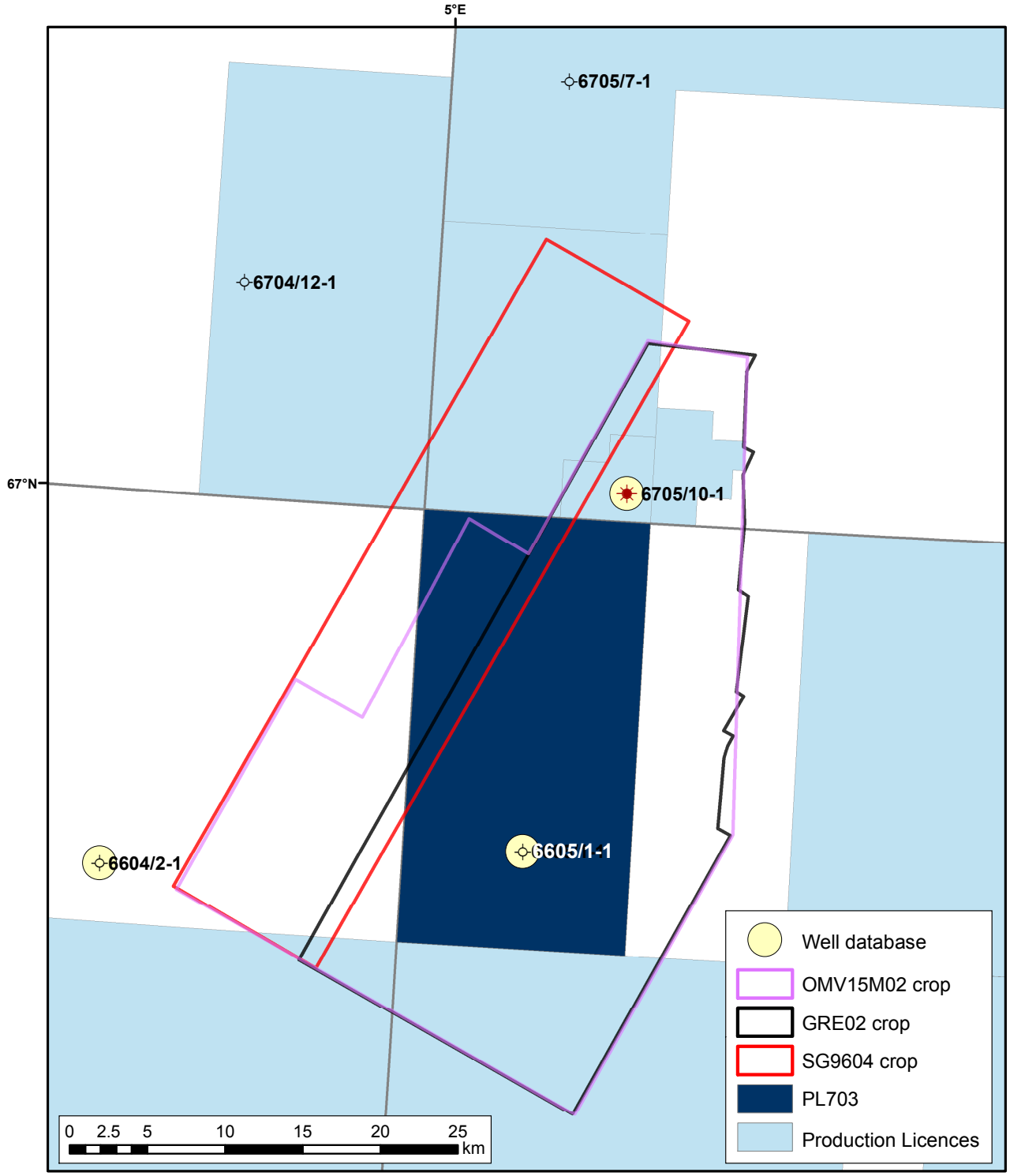

Figure 2.1 Seismic and Well Database Location Map

Table 2.2 Well Database

Well Name	NPDID	Prospect Name	Drilled	TD TVD m RKB	Oldest Pentrated Formation	Oldest Penetrated Age	Hydrocarbons	Operator
6604/2-1	6568	Gullris	2011	3551	Springar Formation	Late Cretaceous	Dry	BG Norge AS
6605/1-1	5979	Obelix	2008	3944.5	Nise Formation	Late Cretaceous	Dry	StatoiHydro
6705/10-1	6044	Asterix	2009	3775	Lange Formation	Early Cretaceous	Gas	StatoilHydro

3 Review of Geological and Geophysical Studies

Exploration within PL703 was largely driven by seismic amplitude anomalies. Consequently, the main component of the license's geological and geophysical work programme was focussed on seismic reprocessing, interpretation and analysis. Utilizing this reprocessed data set several geophysical studies were undertaken, including: rock physics modelling, seismic attribute generation, 2D seismic modelling and gather analysis. Geological studies were catered towards the main prospect on the license which was Asterix South, this mainly consisted of regional pressure analysis with the emphasis on unstanding potential column heights.

Geological Studies

The potential hydrocarbon contact in the Asterix discovery was assessed in order to see its relation to the flat seismic event observed in the neighbouring Asterix South Prospect. It is proposed that the Asterix well only encountered a hydrocarbon down-to within the well, with hydrocarbon filling the reservoir down to an interpreted shale barrier. During the drilling of the Asterix well several pressure points were taken within the hydrocarbon leg of the reservoir, however, a pressure gradient was not established within the water leg. The Operator has measured water gradients from sands within the Obelix and Gullris wells and obseved a similar gradient. By combining the water gradients from 6604/2-1 (Gullris) and 6605/1-1 (Obelix) with the hydrocarbon gradient from 6705/10-1 (Asterix) an approximate hydrocarbon contact can be interpreted at 3320 mTVDSS.

Geophysical Studies

Rock physics modelling of the 6705/10-1 Asterix well data has shown that with constant cement model, where cementation equates to 1,6%, the top Springar Formation will be a peak when brine saturated, and exhibit a strong trough in a gas discovery case (80% gas saturation) (Figure 3.1). An oil discovery (with a saturation of 80%) is modelled to give a weak peak on near offset seismic data (0-20 degrees), whilst it would appear as a trough on

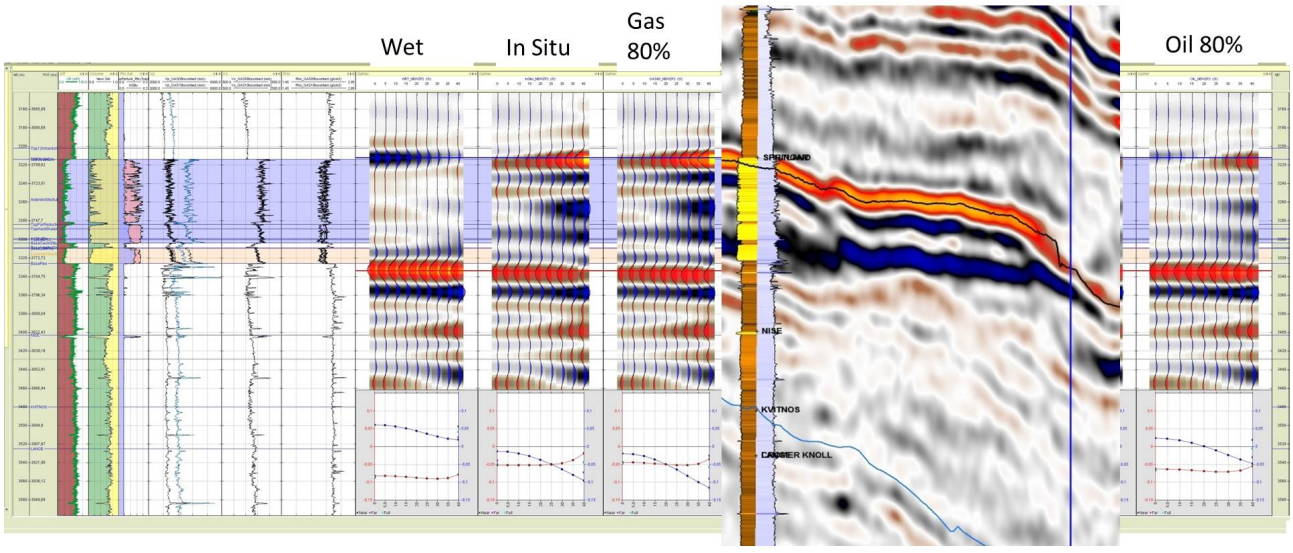

Figure 3.1 Well Modelling - 6705/10-1 (Asterix)
Modelling suggests that a water saturated reservoir should create a peak at top reservoir whilst high percentage gas saturation would cause a trough.

far offset data (20-40 degrees). The modelling shows that an high saturation oil discovery would have a similar appearance geophysically as a low saturation gas case (less than 10% gas saturation). Furthermore, the modelling indicated that a low impedance layer with a low Vp/Vs ratio can only be generated by a gas saturated reservoir.

2D seismic modelling was undertaken within the area in order to assess both the appearance of different degrees of hydrocarbon saturation on seismic and whether hydrocarbon contacts (flat spots) can be accurately modelled. The selected 2D seismic line incorporated both the Asterix and Obelix wells which were used to model the geological properties of the layers. Within the 2D model the key properties to quantify included: effective porosity, shale volume and hydrocarbon saturation. Various levels of hydrocarbon saturations were used in orded to compare the alternative cases with the result of the reprocessed seismic data. Within the Asterix South Prospect location, a reasonably good comparison can be made between the actual seismic and the model. This suggests the Springar Formation contains 19% porosity with an estimated minimum of 75% gas saturation (Figure 3.2). For the Getafix Prospect, wells within Aasta Hansteen were also modelled as this reservoir belongs to the Kvitnos Formation, Late Cretaceous Conaician age. The Getafix Prospect is expected to contain similar reservoir properies to Asterix South with 18% porosity and 80% gas saturation. The Getafix reservoir was modelled to contain interbedded sand and shale layers. The consequence of this interbedded nature is that the hydrocarbon contact does not generate a clear flatspot on seismic, but instead only local cross cutting events. The amplitude response on seismic data has a strong cut off with depth and the model supports this to be associated with a gas-down-to.

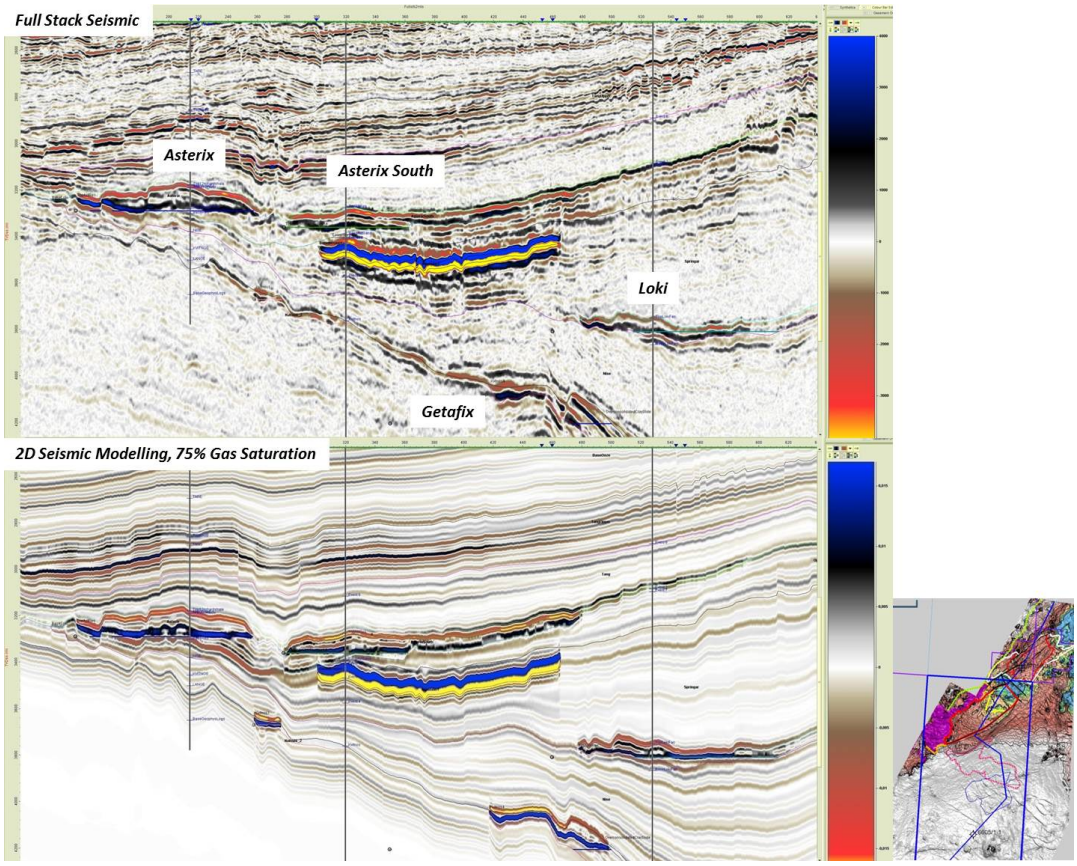

Figure 3.2 2D Seismic Modelling Results
Example line through the Asterix, Asterix South, Loki and Getafix prospects.

A relative acoustic impedance (RelAI) seismic volume was created from the reprocessed seismic data set mainly to address the geometrical imprint and tuning effect at the thinning edges of the Asterix South Prospect (Figure 3.3). The RelAI seismic cube was focussed on accurately imaging the prospect's reservoir pinch out definition after de-tuning the seismic wavelet. The RelAI cube was modelled using the Asterix (discovery case) and Obelix (residual hydrocarbon case) wells to model the hydrocarbon saturation end members (previously modelled during the Rock Physics study). Modelling of these wells showed low impedance layers within the RelAI cube with low Vp/Vs ratio can only be generated by gas saturated sands, a wet sand was modelled to exhibit a very high AI. As a consequence, the RelAI cube identifies pay zones, where hydrocarbons exceed 30% gas saturation. Within Asterix South, the prospect clearly exhibited two sand layers containing hydrocarbons above 30% saturation. These sand bodies are separated by a hard unit, most likley a tight shale. The southern lateral pinch out of these Upper Springar Formation sands is clearly imaged in the cube allowing a strong definition of the southern boundary to the prospect. The RelAI cube did a very good job at de-risking the presence of hydrocarbons and imaging the propspect's southern boundary. However, the imaging of the prospect's eastern boundary was less than successful due to the complication of an underlying igneous body creating reflected seismic noise. This noise proved too difficult to accurately image a base reservoir.

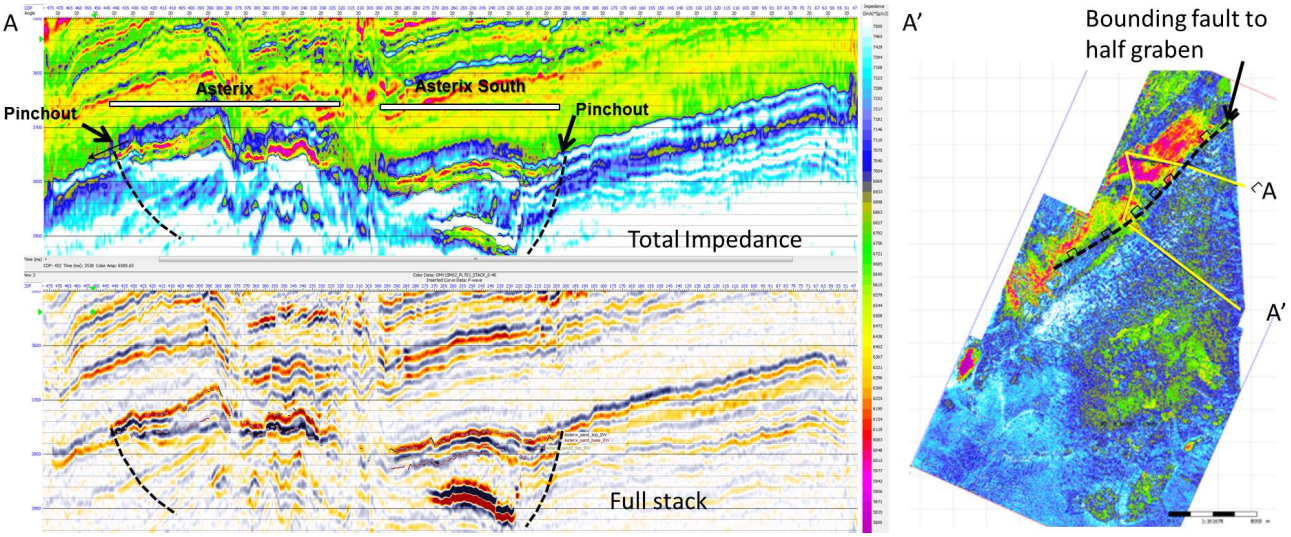

Figure 3.3 Acoustic Impedance Cube vs TWT 0-40 Stack
The resulting RelAI cube depicts the extent of hydrocarbon saturated sands.

The seismic gathers of the reprocessed seismic data set were analysed in Prestack Pro software in order to de-risk both the Loki and Asterix South prospects. A mask was placed on the 6705/10-1 Asterix Discovery Well. The AVO signature at the Asterix well location is interpreted to be class III, this is consistent with that elsewhere within the Asterix discovery. Furthermore, a class III AVO signature can be observed over the Asterix South Prospect. The Loki Prospect was driven by seismic amplitudes within the Cretaceous Nise Formation. During gather analysis, it can be clearly observed that the amplitude anomaly contains two different AVO signatures. The first signature plots along the background trend in the Intercept Gradient plots, whilst the second signature plots in a class III / IV location. This change in AVO character across the prospect suggests the Loki Prospect is smaller than originally thought.

4 Prospect Update

Loki Prospect

The Loki Prospect was the sole prospect identified in the 22nd license round appliction. The prospect is located on the eastern side of the Gjallar Ridge, on the flank of the Vigrid Syncline, approximately 5 km south of the 6705/10-1 Asterix Discovery. The Loki Prospect is a combined truncation and stratigraphic pinch out trap in the Nise Formation. The truncational element was established during Late Cretaceous uplift and erosion (Late Campanian to Early Maastrichtian). The prospect is clearly identified on 3D seismic data with a strong amplitude response.

By analysing the seismic gathers of the reprocessed data it is clear that the Loki Prospect exhibits two AVO classes. To the south and the west a class III AVO response is interpreted within the prospect, this trend is distinctly separate from the background data. The eastern part of the prospect exhibts a similar intercept / gradient plot location to the overall background trend. This suggests the eastern segment to be water wet and consequently the prospect is considerably smaller than on application (Figure 4.1).

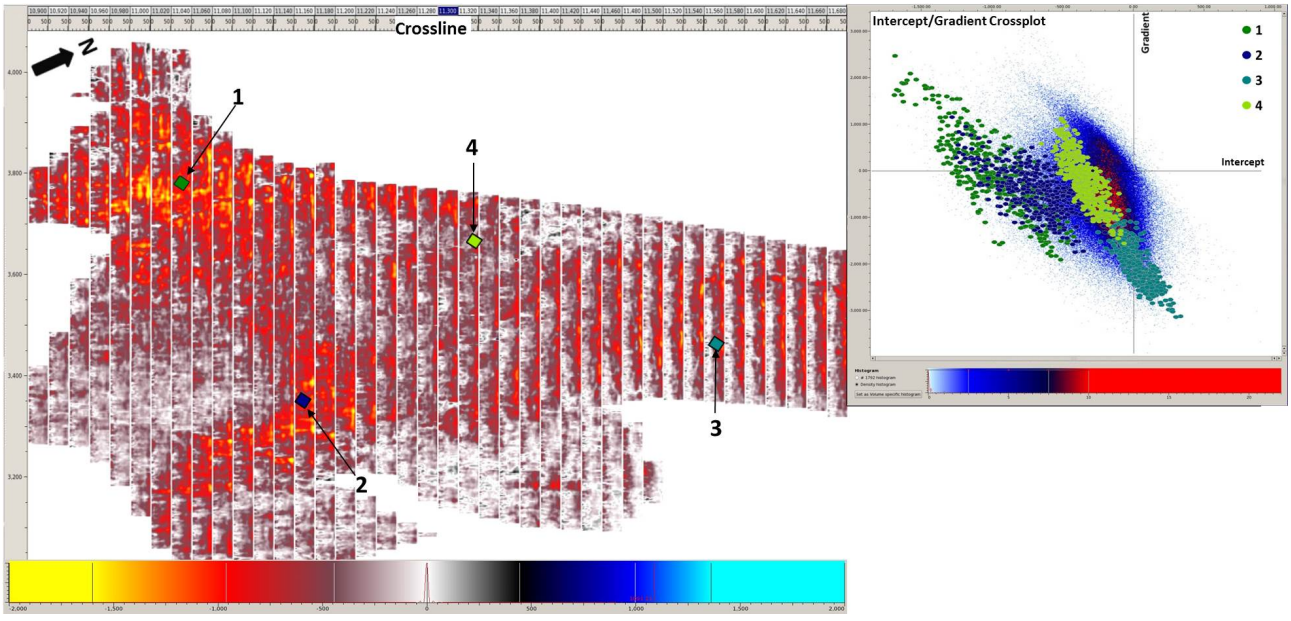

Figure 4.1 AVO Responses Over Loki Prospect
CDP map showing two different AVO responses over the Loki Prospect.

Asterix South Prospect

The Asterix South Prospect is now considered to be the main prospect in the license. The prospect is a complex stratigraphic pinch out with the Springar Formation reservoir sands pinching out to the south and west. Defining the north western boundary of the prospect is a truncation caused by an igneous intrusion. The Asterix South Prospect is considered a down dip extension of the Asterix Discovery (located in PL327 and PL327B). Separating the two potential hydrocarbon bodies are a series of hydrothermal vents (Figure 4.2, Figure 4.3).

The seismic appearance of the Asterix South Prospect is very similar to that of the Asterix Discovery. The Asterix South Prospect also exhibits a flat event within the reservoir section similar to the flat spot proven within Asterix. However, Asterix South's flat event is situated

Table 4.1 Loki Prospect Data Sheet (NPD)

Block	6605/1	Prospect name	Loki	Discovery/Prosp/Lead	Prospect	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	OMV (Norge)	Reference document	PL703 Relinquishment Report			Assessment year	2017
This is case no.:	1 of 1	uctural element	Vøring Basin	Type of trap	Pinch-out	Water depth [m MSL] (>0)	1350	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)	1.79	1.84	9.55	20.80	0.06	0.06	0.45	1.02
Recoverable resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	1.17	1.07	6.91	15.40	0.03	0.03	0.24	0.54
Reservoir Chrono (from)	Campanian	Reservoir litho (from)	Nise Fm	Source Rock, chrono primary	Turonian	Source Rock, litho primary	Lange Fm	Seal, Chrono	Campanian
Reservoir Chrono (to)	Campanian	Reservoir litho (to)	Nise Fm	Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Nise
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	1.00	Oil case (0.00-1.00)	0.00	Gas case (0.00-1.00)	1.00	Oil & Gas case (0.00-1.00)	0.00		
Reservoir (P1) (0.00-1.00)	0.63	Trap (P2) (0.00-1.00)	0.75	Charge (P3) (0.00-1.00)	0.60	Retention (P4) (0.00-1.00)	0.50		
Parametres:	Low (P90)	Base	High (P10)	*Comments*					
Depth to top of prospect [m MSL] (> 0)		3525							
Area of closure [km^2] (> 0.0)	4.0	11.8	19.2						
Reservoir thickness [m] (> 0)	30	36	48						
HC column in prospect [m] (> 0)	87	125	161						
Gross rock vol. [10^9 m^3] (> 0.000)	2.435	2.822	3.637						
Net / Gross [fraction] (0.00-1.00)	0.33	0.54	0.78						
Porosity [fraction] (0.00-1.00)	0.13	0.18	0.24						
Permeability [mD] (> 0.0)	10.0	100.0	500.0						
Water Saturation [fraction] (0.00-1.00)	0.20	0.28	0.35						
Bg [Rm3/Sm3] (< 1.0000)	0.0039	0.0037	0.0036						
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)	0.39	0.52	0.65	For NPD use:					
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Pressure, top res [bar] (>0)	375			Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	1. Porosity 10%	2. VCL 40%	3. Sw 65%					Kart nr	NPD will insert value

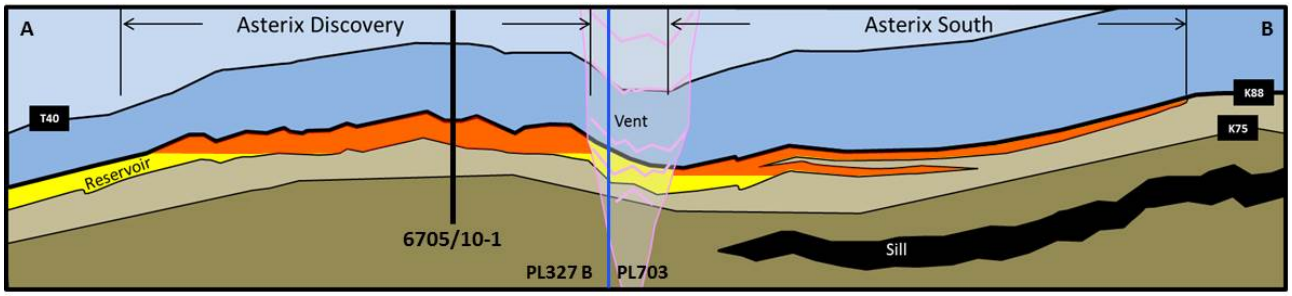

Figure 4.2 Geosection From Asterix to Asterix South Prospect
Geosection showing the relationship between the Asterix South Prospect and the Asterix Discovery.

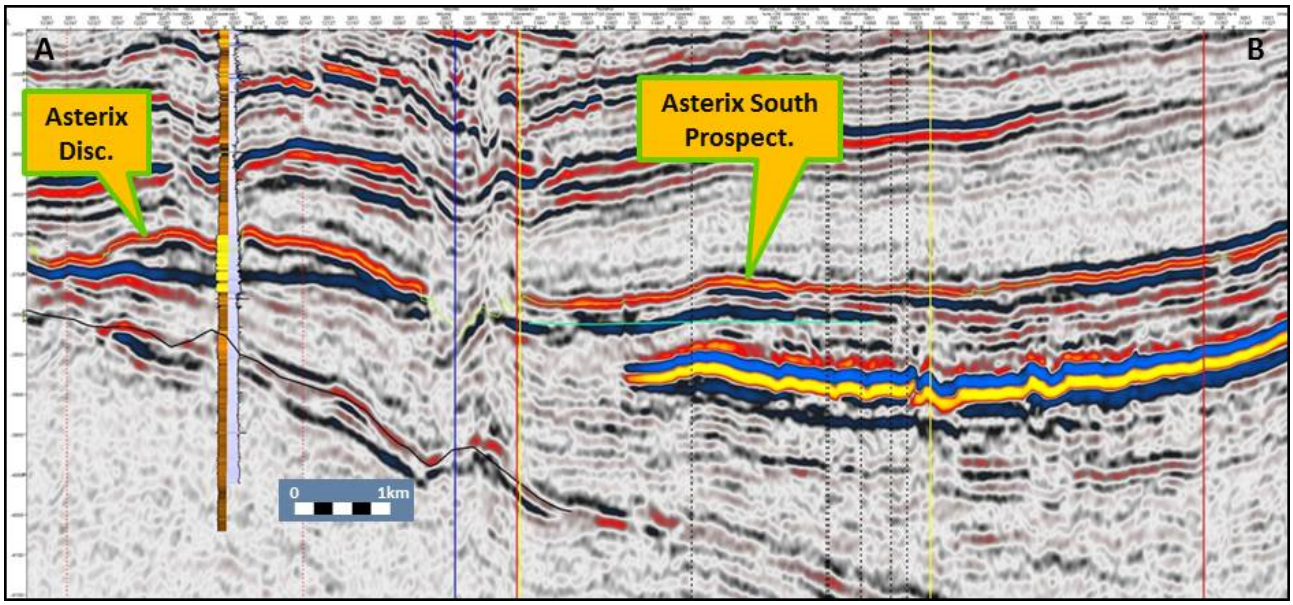

Figure 4.3 Composite Seismic Line From Asterix to Asterix South
Composite seismic line in two-way time relating the Asterix discovery with the Asterix South Prospect.

deeper than that proven in Asterix. The approximate depth of the flat event appears to coincide with the depth of the theoretical hydrocarbon water contact derived from the pressure study.

Analysis of seismic gathers belonging to the reprocessing was completed over the Asterix South Prospect. When comparing the prospect's AVO signature to that of the neighbouring Asterix Discovery, the same class III AVO is observed. By applying an AVO class filter set to that which is present at the discovery well location, a class III AVO signature is observed over both the Asterix Discovery and the Asterix South Prospect. The strength of the class III signature weakens in the centre of the prospect. This is attributed to the diminishing seismic quality in this area due to the imaged seismic noise eminating from the top of the underlying igneous body (Figure 4.4). This increase in noise within the seismic data causes significant problems in imaging the crest of the Asterix South Prospect, elsewhere over the prospect the seismic imaging is considered to be good.

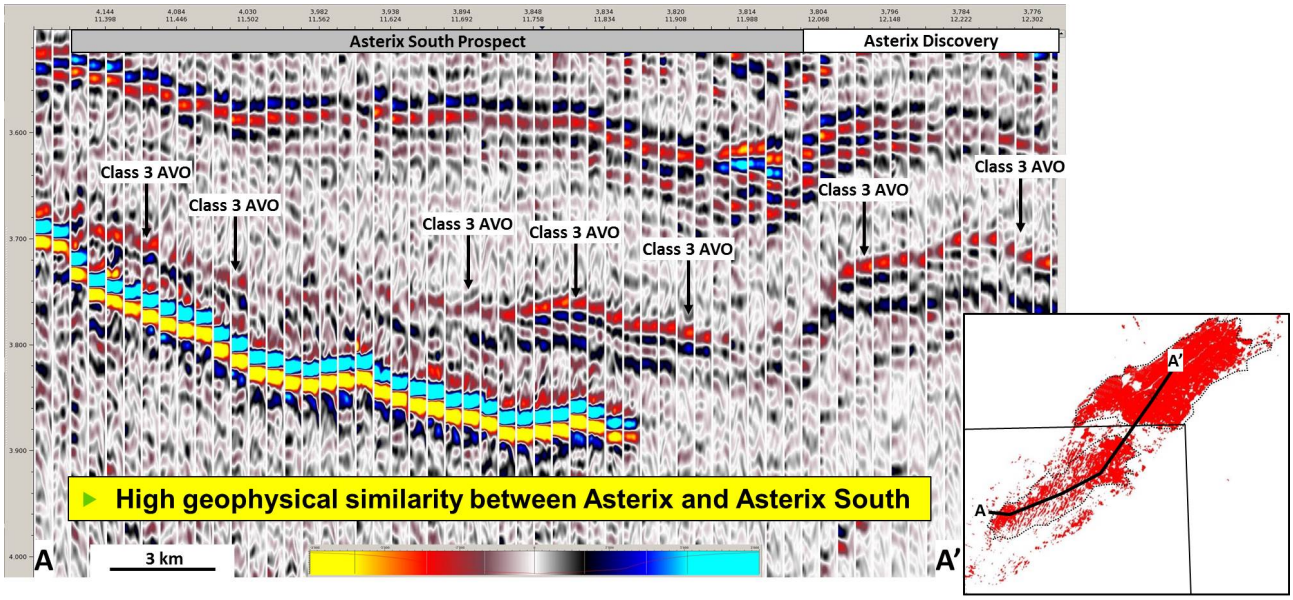

Figure 4.4 Composite Seismic Line of Gathers Through Asterix and Asterix South
Composite line of seismic gather from Asterix to Asterix South Prospect. The line depicts the AVO effect at top Springar

Further work to assess the prospect's reservoir quality was completed. Through the process of 2D seismic modelling, Asterix South is believed to have a reservoir porosity of 19% and a gas saturation of at least 75%.

Table 4.2 Asterix South Prospect Data Sheet (NPD)

Block	6605/1	Prospect name	Asterix South	Discovery/Prosp/Lead	Prospect	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	OMV (Norge)	Reference document	PL703 Relinquishment Report			Assessment year	2017
This is case no.:	1 of 1	Structural element	Vøring Basin	Type of trap	Pinch-out	Water depth [m MSL] (>0)	1330	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)	1.27	1.62	7.68	18.30	0.04	0.05	0.22	0.52
Recoverable resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	0.79	1.09	4.99	12.20	0.02	0.04	0.14	0.32
Reservoir Chrono (from)	Maastrichtian	Reservoir litho (from)	Springar	Source Rock, chrono primary	Turonian	Source Rock, litho primary	Lange Fm	Seal, Chrono	Danian
Reservoir Chrono (to)	Maastrichtian	Reservoir litho (to)	Springar	Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Tang
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	1.00	Oil case (0.00-1.00)	0.00	Gas case (0.00-1.00)	1.00	Oil & Gas case (0.00-1.00)	0.00		
Reservoir (P1) (0.00-1.00)	0.72	Trap (P2) (0.00-1.00)	0.60	Charge (P3) (0.00-1.00)	0.85	Retention (P4) (0.00-1.00)	0.60		
Parametres:	Low (P90)	Base	High (P10)	*Comments*					
Depth to top of prospect [m MSL] (> 0)		3150							
Area of closure [km^2] (> 0.0)	6.3	15.3	26.5						
Reservoir thickness [m] (> 0)	22	37	54						
HC column in prospect [m] (> 0)	70	103	144						
Gross rock vol. [10^9 m^3] (> 0.000)	5.616	9.851	14.841						
Net / Gross [fraction] (0.00-1.00)	0.30	0.40	0.50						
Porosity [fraction] (0.00-1.00)	0.16	0.19	0.21						
Permeability [mD] (> 0.0)	50.0	500.0	2500.0						
Water Saturation [fraction] (0.00-1.00)	0.38	0.31	0.25						
Bg [Rm3/Sm3] (< 1.0000)	0.0034	0.0036	0.0037						
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)	0.55	0.65	0.75						
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)	0.52	0.64	0.75	For NPD use:					
Temperature, top res [°C] (>0)	88			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)	348			Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	1. Porosity 10%	2. VCL 40%	3. Sw 65%					Kart nr	NPD will insert value

Table 4.3 Getafix Prospect Data Sheet (NPD)

Block	6605/1	Prospect name	Getafix	Discovery/Prosp/Lead	Prospect	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	OMV (Norge)	Reference document	PL703 Relinquishment Report			Assessment year	2017
This is case no.:	1 of 1	Structural element	Vøring Basin	Type of trap	Pinch-out	Water depth [m MSL] (>0)	1330	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)	2.12	2.47	7.76	16.00	0.07	0.10	0.36	0.77
Recoverable resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	1.18	1.94	4.54	9.41	0.04	0.07	0.21	0.45
Reservoir Chrono (from)	Coniacian	Reservoir litho (from)	Kvitnos	Source Rock, chrono primary	Turonian	Source Rock, litho primary	Lange Fm	Seal, Chrono	Kvitnos
Reservoir Chrono (to)	Coniacian	Reservoir litho (to)	Kvitnos	Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Coniacian
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	1.00	Oil case (0.00-1.00)	0.00	Gas case (0.00-1.00)	1.00	Oil & Gas case (0.00-1.00)	0.00		
Reservoir (P1) (0.00-1.00)	0.48	Trap (P2) (0.00-1.00)	0.72	Charge (P3) (0.00-1.00)	0.90	Retention (P4) (0.00-1.00)	0.30		
Parametres:	Low (P90)	Base	High (P10)	*Comments*					
Depth to top of prospect [m MSL] (> 0)		3900							
Area of closure [km^2] (> 0.0)	3.5	9.4	19.8						
Reservoir thickness [m] (> 0)	30	57	90						
HC column in prospect [m] (> 0)	120	250	400						
Gross rock vol. [10^9 m^3] (> 0.000)	0.729	1.440	2.293						
Net / Gross [fraction] (0.00-1.00)	0.35	0.50	0.65						
Porosity [fraction] (0.00-1.00)	0.16	0.18	0.20						
Permeability [mD] (> 0.0)	10.0	30.0	50.0						
Water Saturation [fraction] (0.00-1.00)	0.20	0.30	0.40						
Bg [Rm3/Sm3] (< 1.0000)	0.0038	0.0037	0.0035						
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)	0.45	0.59	0.77						
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)	0.45	0.59	0.77	For NPD use:					
Temperature, top res [°C] (>0)	92			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)	355			Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	1. Porosity 10%	2. VCL 40%	3. Sw 65%					Kart nr	NPD will insert value

Getafix Prospect

The Getafix Prospect is a stratigraphic trap with an updip pinch out observed in a reservoir belonging to the Kvitnos Formation. To the west, an element of faulting can be observed to complicate the trapping mechanism. The prospect is based on a seismic amplitude anomaly where a Kvitnos to Lysing aged body is situated on the flank of the Gjallar Ridge. When comparing seismic angles, it is clear that the seismic amplitude brightens on the far offset seismic cube. On the far offset seismic data a clear shut off in seismic amplitudes are observed within the prospect. This amplitude shut off is interpreted to indicate a possible hydrocarbon down to.

Seismic modelling suggests the Getafix reservoir is 70 m of interbedded sands and shales. This interbedded sand and shale relationship within the reservoir appears to distort any amplitude shut off with depth. The sands appear to possess 19% porosity and greater than 70% gas saturation. The initial inputs for the seismic modelling were based on wells from Aasta Hansteen. The gas saturation is also supported by a strong AVO conformance with depth.

Pacifx & Harmonix Leads

Both the Pacifix and Harmonix leads are similar to that of the Getafix Prospect as they are also of Kvitnos aged and are both driven by amplitude anomalies. The Pacifix Lead is an elongate fan body oriented north - south. To the east and the west normal faults are present creating a half graben structure. The half graben is dipping to the south creating the requirement for an up dip pinch out. On RMS amplitude maps, the bright amplitude response of what is interpreted to be reservoir can be observed to stop, this is interpreted as reservoir pinch out. The down dip amplitude response has a relatively good conformance with depth.

The Hamonix Lead is bound to the west by a normal fault and also exhibits an up dip pinch out identified through the RMS amplitude extraction. The down dip amplitude is less conformant suggesting the amplitude is largely a result of reservoir presence rather than hydrocarbons.

5 Technical Evaluations

A technical evaluation and an economic analysis was performed for the Asterix South, Getafix and Loki prospects. A development scenario of a tie-back to the soon to be developed Asterix discovery which will be tied to Aasta Hansteen was envisaged. The results of the economic analysis for the Asterix South Prospect was marginally attractive and the decision was made to attempt bringing in and additional partner to the license in order to share the costs and risk in a possible exploration well. Unfortunately farm-down attempts were unsuccessful.

6 Conclusions

The PL703 partnership has placed considerable effort in evaluating the prospectivity of the license. As a consequence of the work programme, the license stakeholders now have a much greater understanding of the prospectivity in the license and the controls of sand fairway locations. Significant effort has also been made in understanding the nearby Asterix discovery and its possible relationship to PL703.

The merging and reprocessing of seismic datasets into one large seismic volume has greatly improved the identification and assessment of prospects. Through the interpretation of this dataset, the Asterix South Prospect became very attractive due to its similarity and proximity to the Asterix discovery. Assessment of the Asterix South Prospect has shown how seismic noise created by reflections from underlying igneous bodies may mask the reservoir's true seismic character.

All license commitments have been fulfilled. The main reasons for surrendering the license are listed below:

- Although the license contains multiple prospects and leads, the partnership struggles to make these prospects volumetrically attractive. Figure 6.1 depicts the prospectivity for the license, in addition to the location of the original Loki Prospect.
- Both licencees were unable to come to a positive drill decision due to marginal economics coupled with risk.

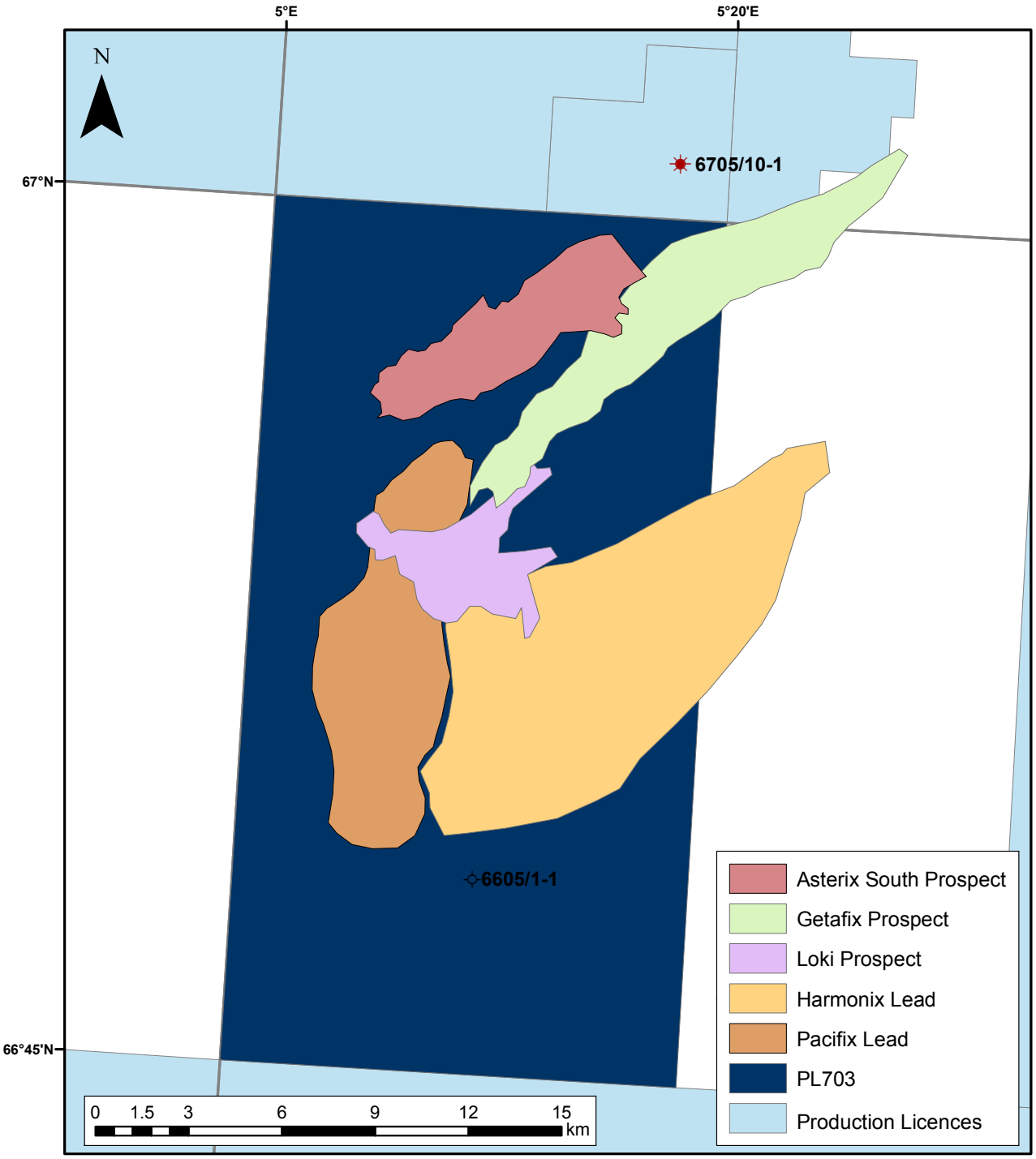

Figure 6.1 PL703 Prospectivity