PL1221
Relinquishment report

May 2026

Petrolia Noco

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1 History of the production licence

General licence information

PL 1221 is located in the Western part of the Frøya High in the Southern part of the Norwegian Sea, 35 km east of the Ormen Lange Field and 4 km south of the Fenja Field, covering entirely block 6306/5 and parts of blocks 6306/2, 6306/3, 6306/4, 6306/7 and 6306/8 (Fig. 1.1). Licence PL 1221 was awarded on March 15th, 2024, to a licence group consisting of Petrolia NOCO AS (operator 40%) and Equinor Energy AS (60%) (Table 1.1).

The work commitment at the time of award consisted in acquiring and/or reprocessing 3D seismic, and decision to drill or drop within 2 years (15/03/2026).

Table 1.1 Partnership Table

Company	Equity (%)
Petrolia NOCO (Operator)	40
Equinor Energy AS	60

Extensions and area relinquishments

No area extension applications or relinquishments were carried out.

Work Program

The initial licence period was for two years and valid until 15th of March 2026, and the work obligations were as follows:

Within 2 years from the award (15th of March 2026):

- Acquire and/or reprocess 3D seismic data
- Perform relevant geological and geophysical studies
- Decision to drill an exploration well or surrender the licence

Within 4 years from the award, Decision to Concretize (BoK) or surrender the licence

Within 6 years from the award, perform conceptual studies and Decision to Continue (BoV) or surrender the licence.

Within 7 years from the award, prepare a development plan and decide to submit PDO or surrender the licence.

The work obligations for the first two-year work period are fulfilled. PGS17M05NWS is a 3D GeoStreamer survey processed to KPSDM covering the licence area has been acquired and relevant geophysical and geological studies were carried out.

Licence meetings

During the life of the licence, several meetings took place and were documented in License2Share (L2S).

2024:

- 15/04/2024 ECMC #1
- 21/08/2024 EC work meeting #1
- 06/11/2024 ECMC #2

2025:

- 02/04/2025 EC work meeting #2
- 13/11/2025 ECMC #3

Reasoning for surrender of licence

The Snøkongen prospect was initially identified as a large stratigraphic trap, based on an isopach map of the Upper Jurassic section deposited over the basement on the Western flank of the Frøya High during the APA application. However, following a more detailed assessment—including interpretation of the PGS17M05NWS 3D seismic survey—it has become evident that the Upper Jurassic sand bodies overlying the Frøya High are far more extensive than originally assumed. This observation undermines the original trap definition. Furthermore, the hydrocarbon migration model indicates a residual risk associated with transport from the source rock to the prospect. The absence of clear carrier beds and limited evidence of effective migration pathways towards Snøkongen significantly challenge the probability of a hydrocarbon accumulation in the target structure.

Given these significant uncertainties, the original prospect has been reinterpreted as five independent, smaller and higher-risk sub-prospects, and the existing data set does not support further meaningful de-risking. Consequently, volumetric estimates have been recalculated for each of the five segments. All identified prospects and leads now represent elevated geological risk coupled with limited resource potential.

Based on this technical evaluation, the PL 1221 licence partners no longer consider Snøkongen a viable drilling candidate and were unable to mature the leads to prospect level. Therefore, the partnership has unanimously decided to relinquish PL 1221 in its entirety.

Fig. 1.1 shows the location of the PL1221 licence and the prospects and leads that were identified.

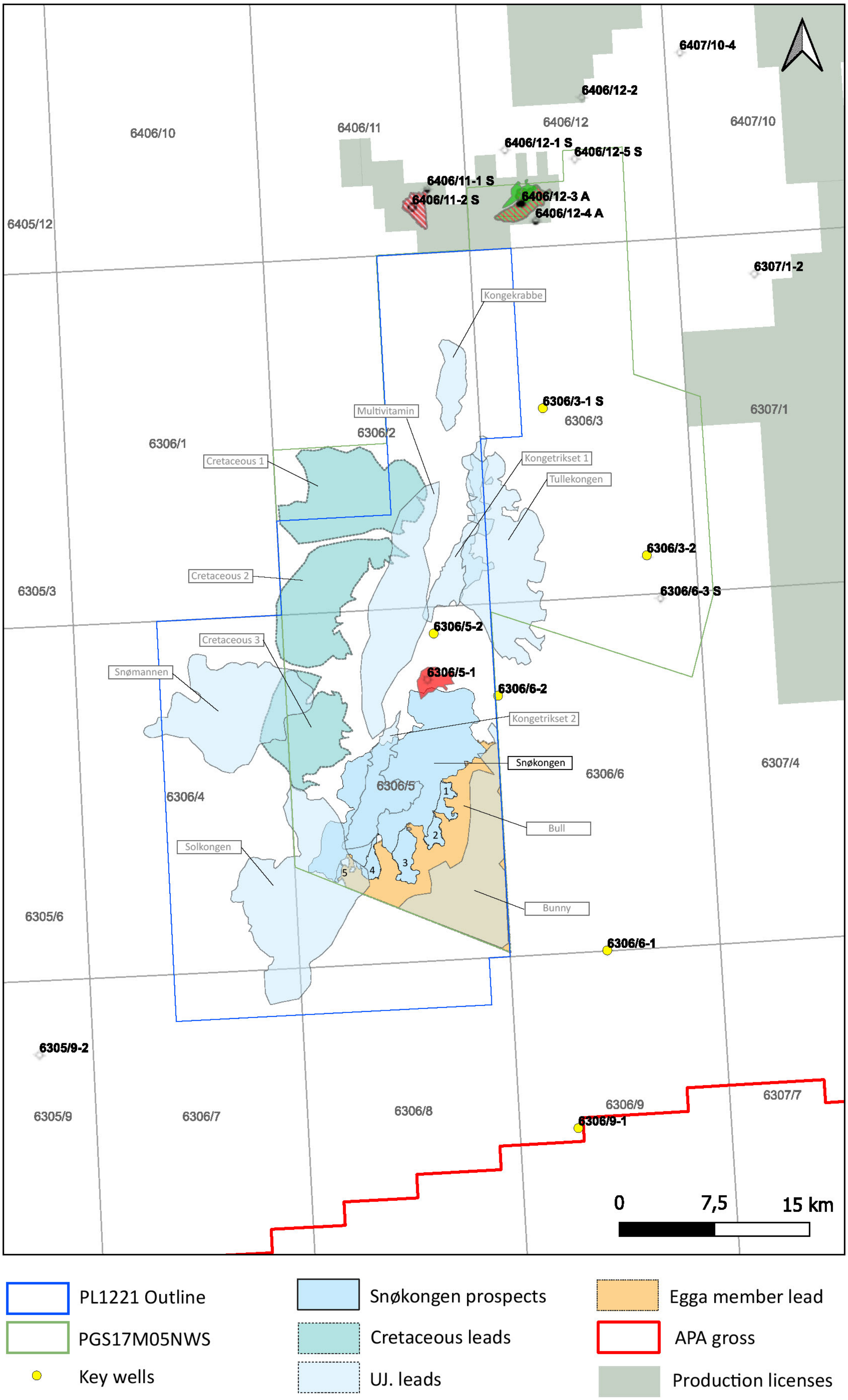

Fig. 1.1 Overview map PL1221

2 Database overviews

2.1 Seismic data

PGS17M05NWS - 3D Seismic Acquisition

The PL 1221 common seismic database shown in Fig. 1.1, comprise approximately 1135 km2 of 3D data covering mainly the licence and part of the surrounding areas. The survey included is PGS17M05NWS as illustrated in Fig. 1.1 and listed in Table 2.1.

Table 2.1 Seismic database

Seismic survey	NPDID	Type	Km2	Quality
PGS17M05NWS	8457	3D	1135	Good

2.2 Well data

The PL1221 common well database includes all released wells in the area (Table 2.2). The key wells used for the prospect evaluation are highlighted in Fig. 1.1.

Table 2.2 Common well database. Key wells are shown in bold. The abbreviations used in the "Purpose" column are as follows: B – Biostratigraphic re-evaluation; C – Computed Petrophysical Interpretation; D – Depth Conversion; M – Basin Modelling; P – Petrographic Analysis; R – Rock Physics Evaluation.

Well name	Release date	NPDID	Purpose*
6304/3-1	07.08.2020	8497	D,
6305/1-1	19.11.2000	3555	D, M,
6305/5-1	07.10.1999	3144	D, M,
6305/8-1	08.09.2002	4109	D,
6305/9-2	14.11.2012	6502	D,
6306/3-1 S	**21.04.2022**	**9401**	**B, C, D, P, R,**
6306/3-2	**12.07.2024**	**9621**	**B, C, D, M, P, R,**
6306/5-1	10.07.1999	3060	D, M,
6306/5-2	**11.10.2017**	**7726**	**B, C, D, M, P, R,**
6306/6-1	**05.07.1996**	**2384**	**B, C, D, M, P, R,**
6306/6-2	**18.06.2010**	**6143**	**B, C, D, M, P, R,**
6306/9-1	**18.01.2024**	**9474**	**B, C, P, R,**
6405/7-1	10.10.2005	4749	D, M,
6405/10-1	07.09.2009	5565	D, M,
6405/12-1	12.04.2016	7551	D,
6406/8-1	11.04.1990	1136	D, M,
6406/11-1 S	18.02.1993	1539	C, D, M, R,
6406/12-1 S	28.02.1993	1711	M,

Well name	Release date	NPDID	Purpose*
6406/12-2	17.10.1997	2640	M,
6406/12-3 A	22.07.2016	7432	C, R,
6406/12-3 B	11.06.2016	7464	M,
6406/12-3 S	26.04.2016	7322	C, D, M, R,
6406/12-4 A	17.09.2017	7774	D,
6406/12-4 S	17.08.2017	7721	M,
6406/12-5 S	12.11.2017	7787	D, M,
6407/7-1 S	07.04.1988	474	M,
6407/7-2	21.01.1989	1017	M,
6407/7-3	18.05.1990	1229	M,
6407/7-4	28.03.1991	1360	M,
6407/7-5	15.02.1993	1699	M,
6407/7-6	16.12.2002	4172	M,
6407/7-7S	20.09.2009	5550	D, M,
6407/10-1	19.06.1989	1054	M,
6407/10-4	19.01.2018	7699	D, M,

3 Results of geological and geophysical studies

Studies

The licence work obligations were satisfied through acquisition and interpretation of the PGS17M05NWS-GeoStreamer-KPSDM 3D seismic dataset. The full stack and offset cubes have been evaluated to be of sufficient quality and gathers were of good quality. Although the ultra ultra-far (UUFar) offset data was determined to be unsuitable for use for AVO analysis the partnership see, based on the modelled seismic response, no need to use this UUFar offset. Accordingly, no additional seismic processing was undertaken.

To conduct more detailed mapping and better understand the reflector configurations, a full stack cube has been targeted through in-house conditioning focused on noise and ringing attenuation and stabilising the intercept and Gradient. This resulted in a more stable signature and was used in seismic attribute mapping, evaluation and better understanding of reflector endings.

Evaluation of the Upper Jurassic Snøkongen Prospect was supported by three core studies:

- Sedimentology and petrography analysis, revised biostratigraphy and GDE mapping based on seismic and well revisions
- Seismic data evaluation (including AVO forward modelling, tuning wedge modelling, and detailed interpretation)
- Petroleum systems analysis to assess the potential of HC generation and migration in the nearby Rås Basin located west of the PL 1221

AVO modelling, constrained by regional data and overburden assumptions, indicated limited potential for conclusive results for Snøkongen.

Semi-Regional Geological Evaluation

A comprehensive semi-regional geological study (Petrolia, 2025) was conducted to assess prospectivity across the Triassic, Jurassic, and Cretaceous intervals encompassing the Frøya High, the margin of the Rås Basin, and a smaller structural depression, in here referred to as the “Mini-Basin”, situated between these two features. The interpretation was based on the PGS17M05NWS GeoStreamer KPSDM 3D seismic dataset, with a particular emphasis on key horizons such as the Base Cretaceous Unconformity (BCU) and the Top Basement.

In addition, detailed internal mapping of these stratigraphic intervals was performed and structural mapping — as an example, a two-way travel time (TWT) map of the top of the Upper Rogn Formation — highlighted potential Upper Jurassic leads and prospects. These are interpreted as stratigraphic traps formed by erosional truncation, likely deposited in foreshore to shoreface environments.

Integrated Reservoir Study

An integrated sedimentological study (Petrolia, 2025), a petrophysical study (Exploro, 2024), and revised biostratigraphic analysis (Equinor, 2025) was carried out to evaluate the reservoir interval along the western margin of the Frøya High. This interval is composed of three distinct units; the first, termed the “Conglomerate” unit, includes Triassic conglomerate and reworked Triassic conglomerate deposited during the Lower and Middle Jurassic; the second corresponds to the Lower Rogn Formation; and the third comprises the Upper Rogn Formation (Fig. 3.1). Emphasis was placed on linking well data and seismic information to better understand the depositional systems.

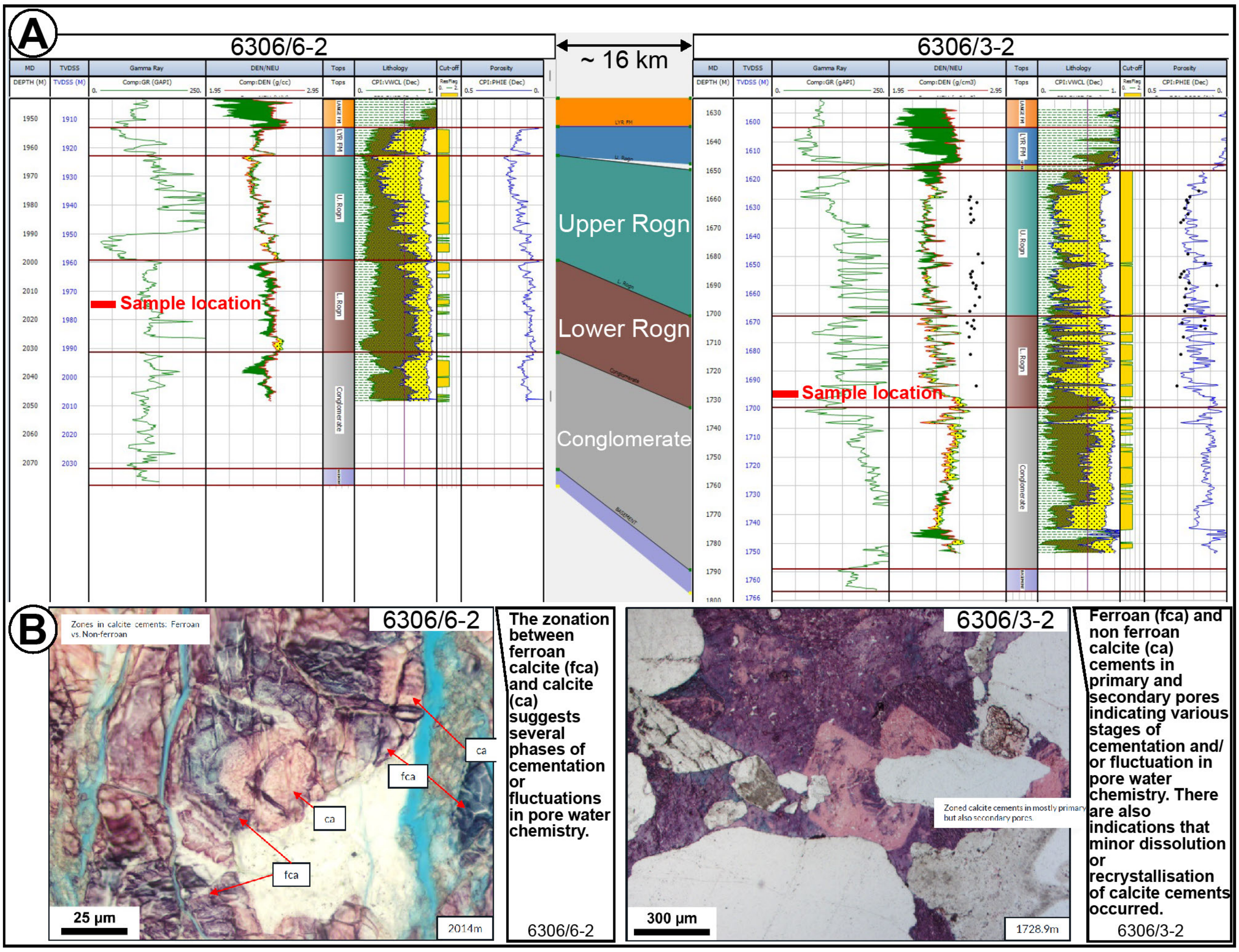

Fig. 3.1 Reservoir Subdivisions

(A) Well correlation of well 6306/6-2 and 6306/3-2 highlights three reservoir units that have been identified across the Frøya High, each exhibiting distinct properties. Unit 1 corresponds to the Conglomerate (Triassic and reworked Triassic), Unit 2 to the Lower Rogn Formation (cemented interval), and Unit 3, representing the thickest and highest-quality interval, to the Upper Rogn Formation; (B) Thin sections of the Lower Rogn interval.

The study integrated seismic reflector interpretations with seismic-attribute analysis; the latter predominantly reflects lithological variations rather than fluid effects. Interpretation of these data supports a depositional model in which the Frøya High was characterised by a back stepping shoreface to foreshore environment, overlying the crystalline basement. In places, especially along the Western flank of the High, deep Triassic channels, later reworked in the Jurassic, have been mapped and tied to nearby wells.

Using the PGS17M05NWS GeoStreamer KPSDM 3D seismic dataset, the updated interpretation reveals a far greater volume of Upper Jurassic sand than originally assumed. Moreover, the previously defined Snøkongen apex appears to be connected up-dip to another sand package, identified as the "Bunny" prospect. Based on this refined geological framework, the study concludes that the initial Snøkongen prospect is no longer valid as a single coherent accumulation. The current understanding is that Snøkongen conisists of five discrete, independent segments, that are limited in resource potential and carries significant risk.

Petrographic Analysis

A petrographic study (PetroStrat, 2025) of 20 core samples (including 7 examined by cathodoluminescence) reveals multiple generations of calcite cement, and minor rhombohedral dolomite. Despite well-developed zonation in calcite (driven by variations in iron content), no consistent cement stratigraphy could be established that is applicable throughout the wells.

Fluid-inclusion data show large variation: homogenization temperatures range roughly from 70 °C to over 140 °C, and measured salinities vary from 0 to ~6.5 wt % NaCl equivalent. These results suggest a complex and variable diagenetic history rather than a uniform cementation model.

Some trends emerge in certain intervals (e.g., in well 6306/6-1), where fluid inclusions around ~2.5 wt % NaCl may reflect brackish early pore fluids consistent with a tidal-channel depositional environment. The associated homogenization temperatures (~75–85 °C) point to significant carbonate cementation phases under these conditions.

The heterogeneous and overprinted cementation poses a risk to reservoir quality, as it could reduce porosity and permeability unpredictably. Moreover, the apparent thermal overprint may reflect structural influences (e.g., faulting), indicating that reservoir heterogeneity is both stratigraphic and structurally controlled (Fig. 3.1).

Petroleum system analysis

The petroleum-system analysis (Migris, 2025) investigated a range of charging scenarios for the mapped prospects and leads in the PL1221 area by combining deterministic modelling and probabilistic simulations to account for geological uncertainty. The principal source rock is the Spekk Formation, with the Melke Formation serving as a secondary source. According to the model, the Upper Jurassic shales in the Snøkongen catchment area are immature on the Frøya High, mature for oil along the basin margin, and gas-mature to overmature in the deeper parts of the Rås Basin.

Most hydrocarbons generated in the distal parts of the source area are expelled before ca. 100 Ma, i.e., prior to the formation of an effective seal above Snøkongen. This timing limits the amount of charge that reaches the Snøkongen structure. Over the migration history, the oil phase is predicted to be progressively replaced by gas in the five independent segments, as oil spills up-dip towards the Bunny prospect and the Bounty area (Fig. 3.2).

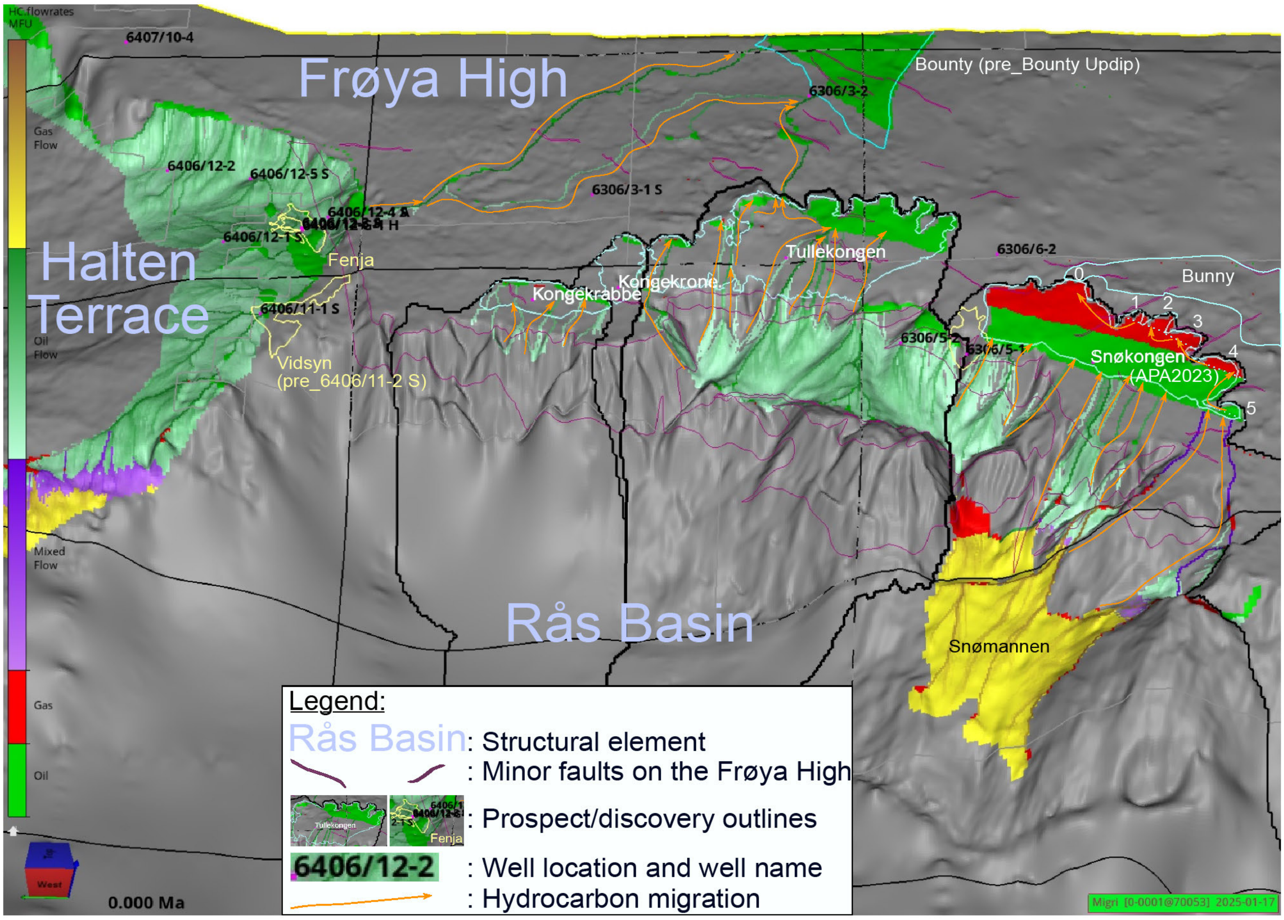

Fig. 3.2 Hydrocarbon Migration

Eastward-oriented 3D view illustrating modelled hydrocarbon migration within the Rogn Formation carrier system during the final simulation timestep (5 Ma to present day). Zone 0 corresponds to the spill point of the former Snøkongen (APA2023) outline, while zones 1 to 5 represent the five independent segments defined following the updated geological re-evaluation.

The risk of biodegradation is assessed as low, due to pasteurization of the trap around 30 Ma and subsequent recharge of fresh oil. The key risks identified by this analysis include: (1) the requirement for carrier beds in the deeper parts of the catchment to enable effective migration; (2) the need for lateral trapping seal towards the East; and (3) uncertainty regarding reservoir quality.

Rock physics study

A rock-physics study (Petrolia, 2025) implemented a workflow to support AVO interpretation of the PGS17M05NWS-KPSDM seismic data. The processing included conditioning of near- to ultra-far stacks (de-noising, bandwidth matching, time alignment) to improve reliability for elastic analysis. Extended elastic-impedance calculations, calibrated on the Fenja discovery well (6406/12-3 S) and a dry well (6306/5-2), determined an optimal chi angle of 23°. No anomaly was observed at that angle over Snøkongen, indicating that there is no Fenja-type reservoir analogue there.

Well analogues (nine wells) were used to derive rock-physics parameters, with properties projected to the burial depth of Snøkongen. These projections show that sands are relatively "hard" compared to surrounding shale—so any porosity increase or fluid fill would likely dim, not brighten, the seismic response. Fluid-substitution modelling for brine, various oil saturations, and gas shows that oil- and brine-saturated sands overlap in elastic properties, making them hard to distinguish seismically, while gas-saturated sand separates more clearly.

Monte Carlo AVO modelling and wedge models support these results. The reservoir's reflection coefficient is positive and decreases with offset; replacing brine with oil further dims the response, and gas yields the strongest effect. Tuning effects are strongest around ~20 ms thickness, and making layers thinner than this makes it difficult to resolve. Finally, seismic observations of polarity shifts and amplitude dimming in mapped channel-like features are consistent with fair to good sand quality—but the possibility of shale or conglomerate fill cannot be ruled out at the current stage (Fig. 3.3).

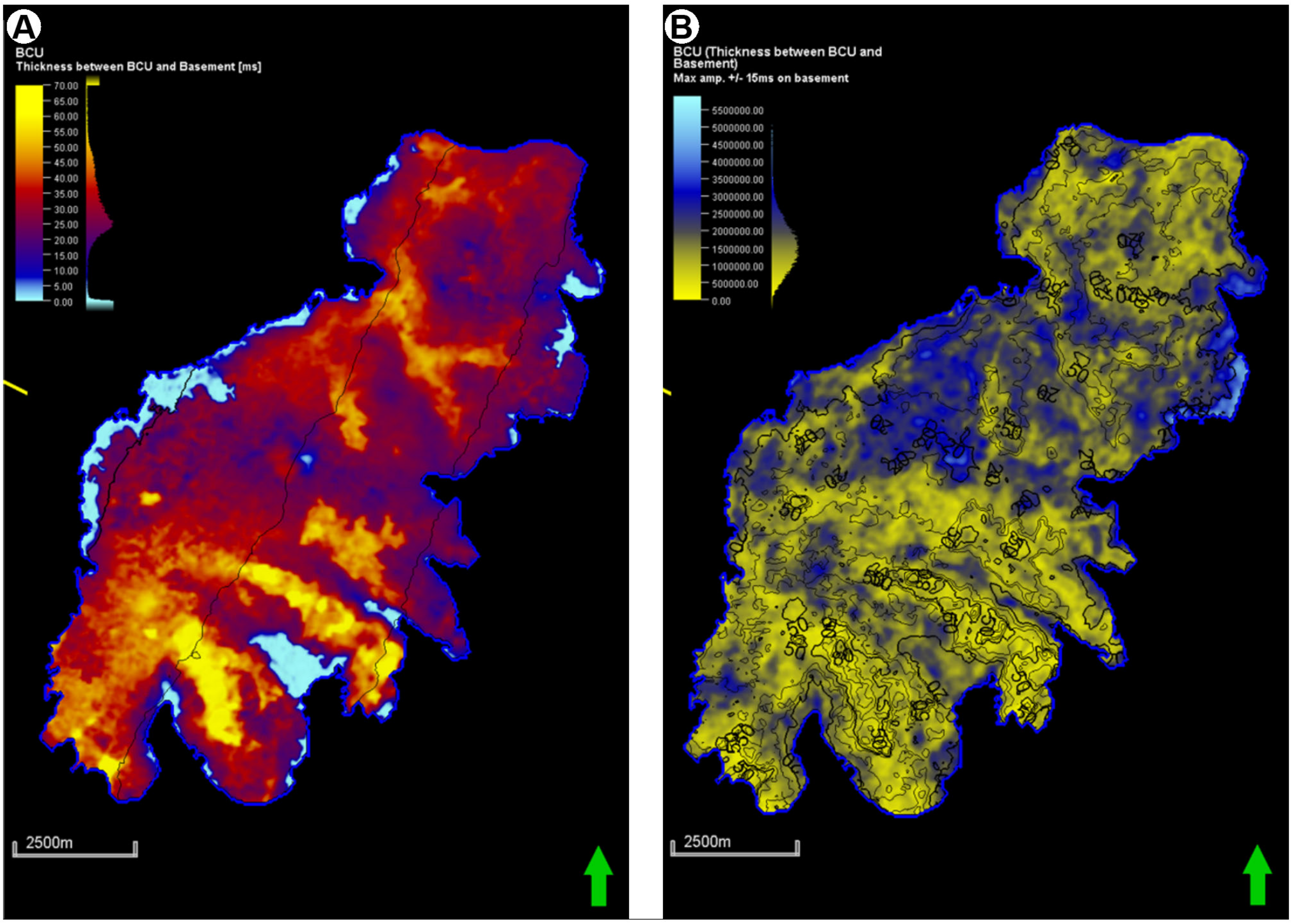

Fig. 3.3 Strong Anti-correlation Between Reservoir Thickness and Seismic Amplitude
(a) Reservoir thickness map highlighting incised Triassic conglomeratic channels; (b) corresponding seismic amplitude map illustrating the inverse relationship between thickness and amplitude response.

Summary Table of Geological and Geophysical Studies

A summary table (Table 3.1) detailing the scope and outcome of each study.

Table 3.1 Summary Table of Geological and Geophysical Studies

Study	*Scope*	*Key Outcomes / Findings*	*Year / Company*
Semi-Regional Geological Evaluation	*Regional geological assessment (Triassic, Jurassic, Cretaceous) across the greater Frøya High*	*Identification of backstepping shoreface–foreshore environments, mapping of deep channels, refined structural and*	*2025 / Petrolia NOCO AS*

Study	*Scope*	*Key Outcomes / Findings*	*Year / Company*
		stratigraphic framework	
Biostratigraphy Study	*Review and reassess biostratigraphic zonation from basement to Lower Cretaceous*	*Improved age control, better well-to-well correlations, enhanced stratigraphic framework*	*2025 / Equinor Energy AS*
Petrophysical Study	*Analysis of rock physical properties for reservoir intervals*	*CPI generation, Porosity, N/G, heterogeneity in facies, constraints on reservoir quality (Cut-off)*	*2024 / Exploro AS*
Integrated Reservoir Study	*Integrated sedimentology, petrophysics, biostratigraphy and seismic interpretation*	*Definition of four distinct reservoir units, Initial prospect reinterpreted into five smaller and independent sub-prospects*	*2025 / Petrolia NOCO AS*
Petrographic Analysis	*Thin section, cathodoluminescence, fluid-inclusion analysis on core samples*	*Multiple cement generations (calcite, dolomite), complex diagenetic history, large variability in fluid-inclusion salinity/ temperature*	*2025 / PetroStrat AS*
Petroleum-System Analysis	*Charge modelling (deterministic + probabilistic) for prospects/leads*	*Main source = Spekk Fm, limited charge to target, gas overprints oil, key risks in migration and seal*	*2025 / Migris AS*
Rock Physics Study	*Seismic conditioning, AVO modelling, fluid-substitution*	*Calibration of elastic models, distinct gas seismic signature, ambiguous oil/brine response, uncertainty on reservoir fill*	*2025 / Petrolia NOCO AS*

4 Prospect update report

Snøkongen (APA2023) – initial prospect

The initial Snøkongen prospect, defined in APA 2023 as a large Upper Jurassic stratigraphic trap, has been substantially downgraded (Fig. 4.1). New seismic interpretation using the PGS17M05NWS GeoStreamer-KPSDM dataset reveals a much larger volume of sand over the Frøya High than was mapped on the older MC3D-FH2006 survey. This additional sand undermines the apex-based trap geometry that formed the basis of the original prospect rendering the trap concept invalid at its core.

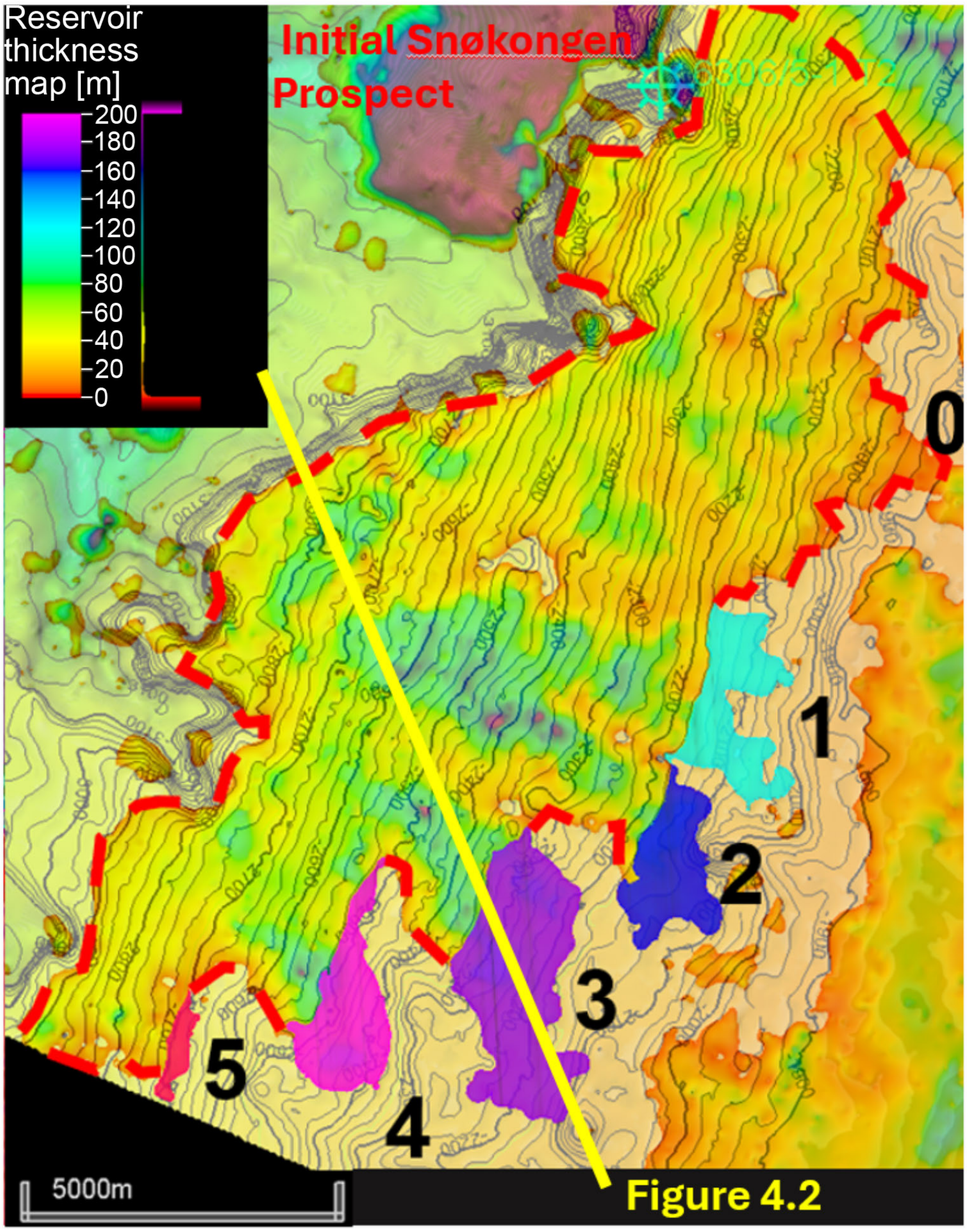

Fig. 4.1 Reservoir Thickness and Prospect Polygon Outlines

Isopach map from Top Basement (base reservoir) to Top Reservoir (BCU), overlain with top reservoir structural contours. Annotation (0) marks the apex of the former Snøkongen Max prospect, where potential leakage toward the Bunny prospect is inferred from the thickness distribution, explaining why the APA 2023 outline is no longer considered valid. Annotations (1) to (5) correspond to the five independent stratigraphic segments defined in the updated interpretation. Among these, Segment 3 represents the primary prospect based on the PGS17M05NWS dataset.

The reservoir has been reinterpreted in three main intervals: a Triassic conglomerate (potentially reworked in the Lower and Middle Jurassic), a cemented Lower Rogn Formation, and an Upper Rogn Formation — the latter being the thickest and most promising interval. However, substantial risks remain. Migration modelling suggests that carrier beds may have been eroded, especially along the Klakk Fault Complex limiting hydrocarbon charge. In addition, much of the expelled hydrocarbons from distal parts of the Rås Basin are predicted to have been expelled prior to about 100 Ma, before a competent seal formed above Snøkongen, severely restricting charge in to the prospect.

Sealing risk remains high and the lateral seal created by the juxtaposition of shale and reservoir sand is not confidently resolved at seismic scale. The proposed regional top seal (Lyr and Lange formations) has not been demonstrated in this part of the area. The base of the trap is also uncertain, since basement weathering and fracturing have been documented in multiple wells on the Frøya High. When combined with the invalidated trap geometry, the reduced reservoir effectiveness, and the remaining uncertainties in both charge and seal, the likelihood of a viable Snøkongen (APA2023) prospect is significantly reduced under the current geological interpretation. As a result, the original Snøkongen structure has been redefined into five smaller sub-prospects (Segments 1 to 5), each characterised by its own structural apex and hydrocarbon contact.

These five new leads/prospects (Segments 1 to 5) are situated above deeply incised Triassic channels that were likely reworked during the Lower and Middle Jurassic, and subsequently overlain by backstepping Upper Jurassic foreshore to shoreface deposits of the Rogn Formation. The overlying BCU unconformity produced significant erosional truncation across the Frøya High; however, the incised channels were partly preserved due to differential erosion. For the prospect evaluation, attention is focused on the largest of these segments in terms of potential volume, corresponding to Segment 3. The other segments are considered too risky and small and are considered leads.

Additional prospectivity was later identified in the licence for the following geological periods, Triassic, Jurassic, Cretaceous and Paleogene, during the licence, but none of the plays/leads has been uplifted to prospect (Table 4.1).

Table 4.1 Overview of leads and prospects

Polygon Name	*Location*	*Targeted Reservoir*	*Main Risk*	*H-Level*
Kongetrikset 1	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C.*	*H0*
Kongetrikset 2	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C.*	*H0*
Bull	*Frøya High*	*Egga Member*	*T./S./C./R.*	*H1*
Bunny	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C.*	*H1*
Multivitamin	*Mini-Basin*	*T. + J. + C.*	*R./S.*	*H1*
Cretaceous 1	*Rås Basin*	*L. C.*	*R./C.*	*H1*
Cretaceous 2	*Rås Basin*	*L. C.*	*R./C.*	*H1*
Cretaceous 3	*Rås Basin*	*L. C.*	*R./C.*	*H1*

Polygon Name	*Location*	*Targeted Reservoir*	*Main Risk*	*H-Level*
Solkongen	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C./R.*	*H2*
Kongekrabbe	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C.*	*H2*
Kongekrone	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C.*	*H2*
Tullekongen	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*T./S./C.*	*H2*
Snømannen	*Rås Basin*	*U. J.*	*R./T./S.*	*H2*
Snøkongen (APA2023)	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*No trap – not valid*	*H2*
Segment 1	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*C./S.*	*H2*
Segment 2	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*C./S./T.*	*H2*
Segment 4	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*C./S.*	*H2*
Segment 5	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*C./S./R.*	*H2*
Segment 3	*Frøya High*	*U. J. (+ T. + L.-M. J.)*	*C./S.*	*H3*

Table 4.1 summarises *the exploration prospects/leads in PL1221, detailing their names, locations, targeted reservoirs, main risks, and maturation (H-Level). For main risk,* ***T*** *= Trap,* ***C*** *= Charge,* ***S*** *= Seal,* ***R*** *= Reservoir; for the targeted reservoir,* ***T*** *= Triassic,* ***J*** *= Jurassic,* ***C*** *= Cretaceous,* ***U*** *= Upper,* ***M*** *= Middle,* ***L*** *= Lower; for the H-Level,* ***H0*** *corresponds to an idea,* ***H1*** *to a play/concept,* ***H2*** *to a lead,* ***H3*** *to a prospect, and* ***H4*** *to a prospect ready to drill.*

Segment 3 of Snøkongen (2025) – redefined prospect

A revised seismic interpretation based on the PGS17M05NWS GeoStreamer KPSDM dataset has fundamentally changed the structural understanding of the Snøkongen prospect. The updated geological model no longer supports the single large trap previously defined, and the area is now subdivided into five independent structural segments. Among these, Segment 3 represents the most volumetrically significant target and is therefore the focus of the following prospect definition and evaluation (Fig. 4.1).

The Segment 3 prospect is defined by Upper Jurassic shallow-marine sands preserved within partially eroded Triassic channels, where channel-fill and lag deposits form the primary reservoir. The trap concept relies on stratigraphic pinch outs within the deeper channel system combined with erosional truncation towards the crest, with top and lateral containment assumed to be provided by Lyr–Lange shales, although their sealing capacity remains unproven in this area (Fig. 4.2). Charge is expected to originate from the Rås Basin, where migrating hydrocarbons, initially oil and later displaced by gas, could have followed turbiditic pathways towards the Frøya High.

However, both the validity of the trap geometry and the effectiveness of lateral sealing remain the dominant risks, compounded by the fact that migration toward the prospect has not yet been demonstrated.

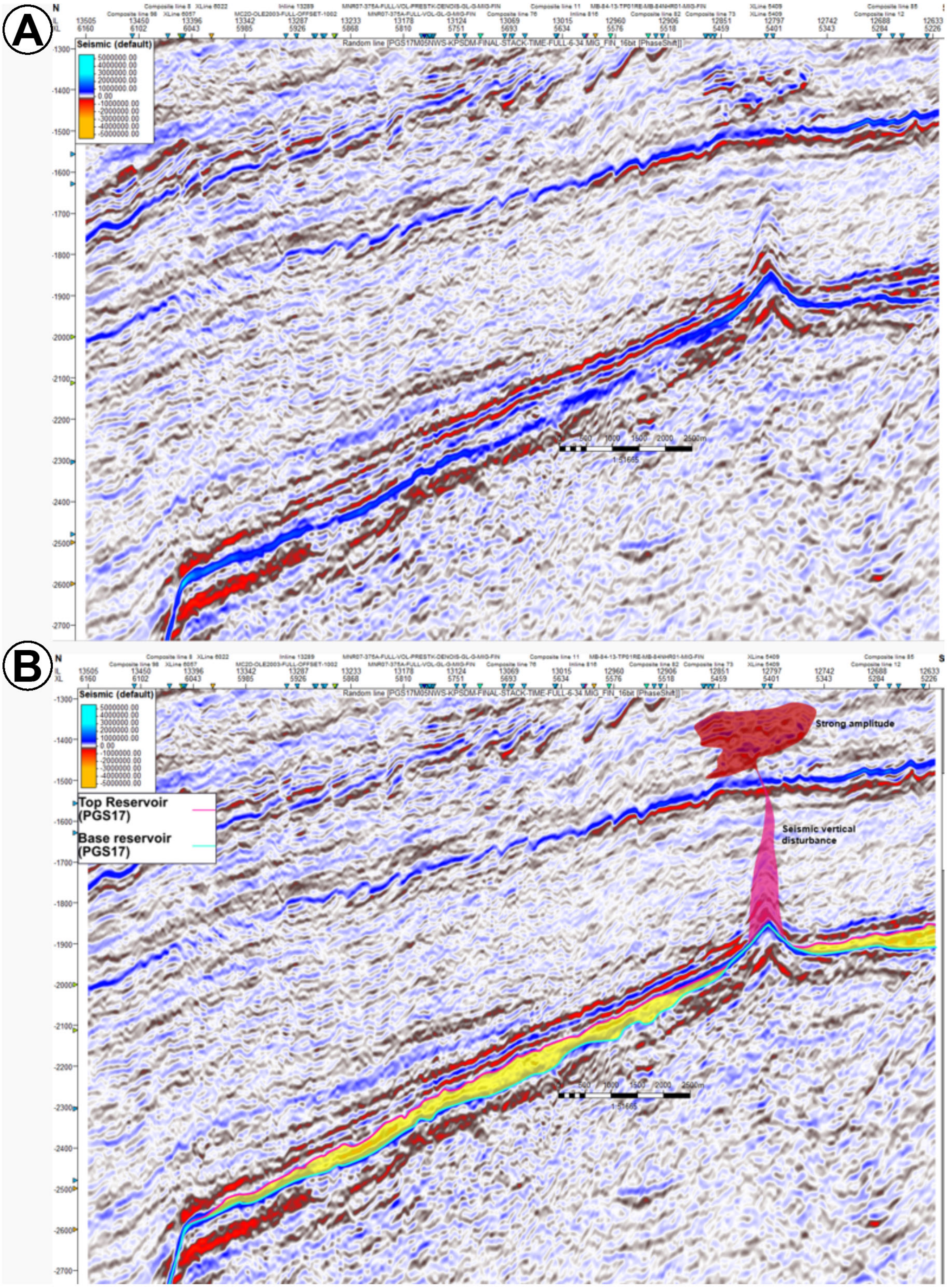

Fig. 4.2 Seismic Interpretation Through Segment 3

(a) Uninterpreted seismic line; (b) interpreted seismic line through Segment 3, highlighting the erosional truncation trap geometry. The location of the seismic line is shown in Figure 4.1.

The probability of encountering an effective reservoir is assessed at 0.8, reflecting generally good reservoir presence but with a notable risk of cementation reducing the quality. The trap is interpreted as a stratigraphic erosional truncation, but its definition remains uncertain due to seismic-resolution limitations and reliance on a 20 m net-sand threshold for mapping; the associated trap probability is therefore estimated at 0.8. Charge is considered mature and available (1.0), although uncertainties in migration pathways and timing reduce the overall charge probability to 0.6. Seal risk is the dominant uncertainty, primarily related to the effectiveness of lateral sealing where thief sands or silty intervals within the Lyr and Lange formations may compromise retention; seal probability is assessed at 0.4. Combined, these elements give Segment 3 an overall chance of success of 0.15. The estimated recoverable volumes for Segment 3 range from 1.9 to 12.5 × 10^6 Sm³ o.e. (P90–P10) (Table 4.2).

Table 4.2 Snøkongen Segment 3 prospect data

Block	6306/5	Prospect name	Snøkongen - Segem	Discovery/Prosp/Lead	Prospect	Prosp ID (or New!)	NOD will insert value	NPD approved (Y/N)	
Play name	NOD will insert value	New Play (Y/N)	No	Outside play (Y/N)					
Oil, Gas or O&G case:	Gas	Reported by company	Petrolia NOCO AS	Reference document				Assessment year	
This is case no.:	1 of 1	Structural element	Frøya High	Type of trap	stratigraphic	Water depth [m MSL] (>0)	230	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)	0.47	1.56	1.69	3.03				
Recoverable resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	0.30	0.84	1.10	1.99				
Reservoir Chrono (from)	Tithonian	Reservoir litho (from)	Rogn Fm	Source Rock, chrono primary	Kimmeridgian	Source Rock, litho primary	Spekk Fm	Seal, Chrono	Barremian
Reservoir Chrono (to)	Rhaetian	Reservoir litho (to)	Red beds	Source Rock, chrono secondary	Oxfordian	Source Rock, litho secondary	Melke Fm	Seal, Litho	Lyr/Lange Fms
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)		Oil case (0.00-1.00)		Gas case (0.00-1.00)	0.15	Oil & Gas case (0.00-1.00)			
Reservoir (P1) (0.00-1.00)	0.80	Trap (P2) (0.00-1.00)	0.80	Charge (P3) (0.00-1.00)	0.60	Retention (P4) (0.00-1.00)	0.40		
Parametres:	Low (P90)	Base	High (P10)	*The input parameters are reported as Low (P90) - Base (Pmean) - High (P10)*					
Depth to top of prospect [m MSL] (> 0)	2110	2110	2110						
Area of closure [km^2] (> 0.0)	1.7	3.4	4.8						
Reservoir thickness [m] (> 0)	30	50	70						
HC column in prospect [m] (> 0)	95	150	210						
Gross rock vol. [10^6 m^3] (> 0.000)	0.230	0.245	0.250						
Net / Gross [fraction] (0.00-1.00)	0.37	0.49	0.62						
Porosity [fraction] (0.00-1.00)	0.15	0.18	0.20						
Permeability [mD] (> 0.0)									
Water Saturation [fraction] (0.00-1.00)	0.25	0.20	0.15						
Bg [Rm3/Sm3] (< 1.0000)	0.0046	0.0048	0.0051						
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)	0.55	0.64	0.75						
Recov. factor, gas main phase [fraction] (0.00-1.00)									
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)				For NPD use:					
Temperature, top res [$^\circ$C] (>0)	80			Innrapp. av geolog-init:	NOD will insert value	Registrert - init:	NPD will insert value	Kart oppdatert	NPD will insert value
Pressure, top res [bar] (>0)	200			Dato:	NOD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	1. Porosity > 0.1	2. VCL < 0.5	3.					Kart nr	NPD will insert value

Other prospectivity

An updated overview of all mapped leads is presented in Fig. 1.1 and Table 4.1. Since the APA application, additional leads were identified; however, none could be sufficiently de-risked to progress towards drillable prospect status. Detailed seismic mapping and geological re-evaluation concluded that all leads remain non-prospective. Across the remaining stratigraphic intervals, the identified opportunities are characterised either by limited volumetric potential or by unacceptably high geological risk. Consequently, no viable candidates for further prospect maturation exist within the licence at this stage.

5 Technical assessment

A techno-economic evaluation was carried out ahead of the Drill-or-Drop decision to determine the updated Minimum Economic Field Size required for drilling an exploration well within PL1221. The development concept considered for the Segment 3 Prospect (Conglomerate and Lower & Upper Rogn formation Units) was intentionally minimalistic, reflecting the limited resource potential. It assumed a single production line from Segment 3 tied back approximately 45 km to the Fenja subsea templates. Produced dry gas would be processed at the Njord A platform and subsequently exported through the Åsgard Transport System.

Segment 3 is assessed as a dry-gas accumulation, with a drainage strategy based on pressure depletion via a single gas producer. The economic screening resulted in a negative NPV, a MEFS exceeding the Pmean volume estimate, and a negative POSe.

6 Conclusion

The prospectivity within PL1221 has been comprehensively assessed. All leads and prospects identified during the licence period have been evaluated and deemed non-prospective due to their limited volume potential and high geological risk. Consequently, the partnership has unanimously decided to relinquish PL1221 in full.

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