PL 955 Licence status report

Summary

PL955 is located 68km Northeast of Johan Castberg and 108km Southwest of Wisting within blocks 7321/10 and 7321/11. The licence was applied for in the 2017 APA round and was previously known as PL717. The main prospects within the licence were the Snøfokk cluster, downfaulted Jurassic structures adjacent to a step in the main fault of the Bjørnøyrenna Fault Complex. These are divided into three separate prospects; Snøfokk Northeast, West, and Southeast. Additionally, Cretaceous intervals were also evaluated for prospectivity.

The work programme in the initial license period was to reprocess 3D seismic data covering the license area and the wells 7321/8-1 and 7321/9-1 to the north of the license, focussing on improving velocity model and angle stacks. Purchasing CSEM data over the prospective area was also part of the initial work programme. The work programme was fulfilled through the merge and reprocessing of WG1101 and SSG1201 into EQ20M01. The EVO style workflow for the reprocessing involved iterative and interactive stages of migration and velocity model building and was able to significantly improve data quality, especially with respect to multiple energy and signal to noise ratio. EQ20M01 was then used for a full re-interpretation of seismic horizons, AVO analysis, and a structural geological and fault seal study. Additionally, a new 3D Gauss-Newton inversion of the BSC12l CSEM data in the region was completed.

Interpretation of EQ20M01 resulted in an improved understanding of the stratigraphy across the license area, mostly confirming previous interpretations. However, within the pre-defined Snøfokk prospects, the reprocessed seismic data in combination with regional geological understanding have resulted in a change of stratigraphy believed to be present. The current understanding is now that most of the formations within the Realgrunnen Subgroup is eroded, concequently the reservoir is not present in the main prospects. Within the pre-defined prospects, the AVO work concluded that there were strong indications of gas hats at Realgrunnen level in Snøfokk Southeast, but only one weak shut off within the Snadd Formation in the Snøfokk Northeast which had no corresponding flat spots. As such this is interpreted to be a thin gas filled Snadd sand. The study did illuminate an additional prospect at Realgrunnen level within the licence, Anthe, which showed a structurally conformant strong class 3 up dip and strong class 2p AVO anomaly which has been given a slight DHI uplift. Near zero hydrocarbon potential was seen within the Cretaceous interval due to limited reservoir development and leads defined in the APA2017 application (*Figure 8*) are no longer considered as leads.

The new inversion of CSEM data provided only marginal gains from the work completed in 2017. An anomaly is seen at top Realgrunnen level in the 2020 work in a similar location to previous inversions, but it is not in the same spatial location as the AVO shut off seen in Snadd Fm. There is also lack of structural conformance, especially with the new structural understanding of Snøfokk Northeast and Southeast prospects where the original fault separating the two prospects no longer reaches top reservoir level. The structural interpretation also revealed complex and varying fault orientation patterns as well a high potential for internal compartmentalisation.

Given the technical work completed in 2020 and the distance of PL955 to existing or planned infrastructure, no drilling candidates have been identified and the partnership has agreed to relinquish the licence.

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1 Licence history

Licence: PL955 - blocks 7321/10 and 7321/11

Awarded: 02.03.2018

Licence period: Expires 02.03.2026
Initial period: 02.03.2021

Licence group:

Equinor Energy AS	50% (Operator)
Aker BP ASA	30%
Spirit Energy Norway AS	20%

Licence area: 602.950 km^2

Work program: Reprocess seismic in region focussing on improving velocity model and angle stacks and purchase CSEM data over the prospective area.

Meetings held:

05.02.2018	ECMC start-up meeting
27.11.2018	ECMC meeting
21.11.2019	ECMC meeting
10.06.2020	ECMC workmeeting
26.11.2020	ECMC meeting

Work performed:

2018:	Licence start-up
	Reprocessing of 3D seismic covering the licence region
2019:	Reprocessing of 3D seismic covering the licence region
2020:	Geophysical well ties on new 3D seismic volumes
	3D seismic interpretation
	AVO studies on new seismic volumes
	CSEM inversion
	Structural fault seal analysis

Reason for surrender:
The exploration potential of PL955 has been evaluated on a merged and reprocessed 3D seismic dataset (EQ20M01) and a new inversion of the CSEM data (BSC12I). The new seismic volumes were able to provide a direct tie from wells in the north to the Snøfokk prospects, but were not able to de-risk the complex geological setting. [redacted] No commercial drilling candidates have been identified within the licence.

2 Database overview

An overview of the common database is shown in *Figure 1*, *Table 1*, and *Table 2*. Notwithstanding the south-east corner of the licence, PL955 is completely covered by the merged EQ20M01 survey as are two of the wells to the north. The EQ20M01 survey is comprised of a merge of 893 km^2 of the eastern aspect of WG1101 and the northern 306.6 km² of SSG1201.

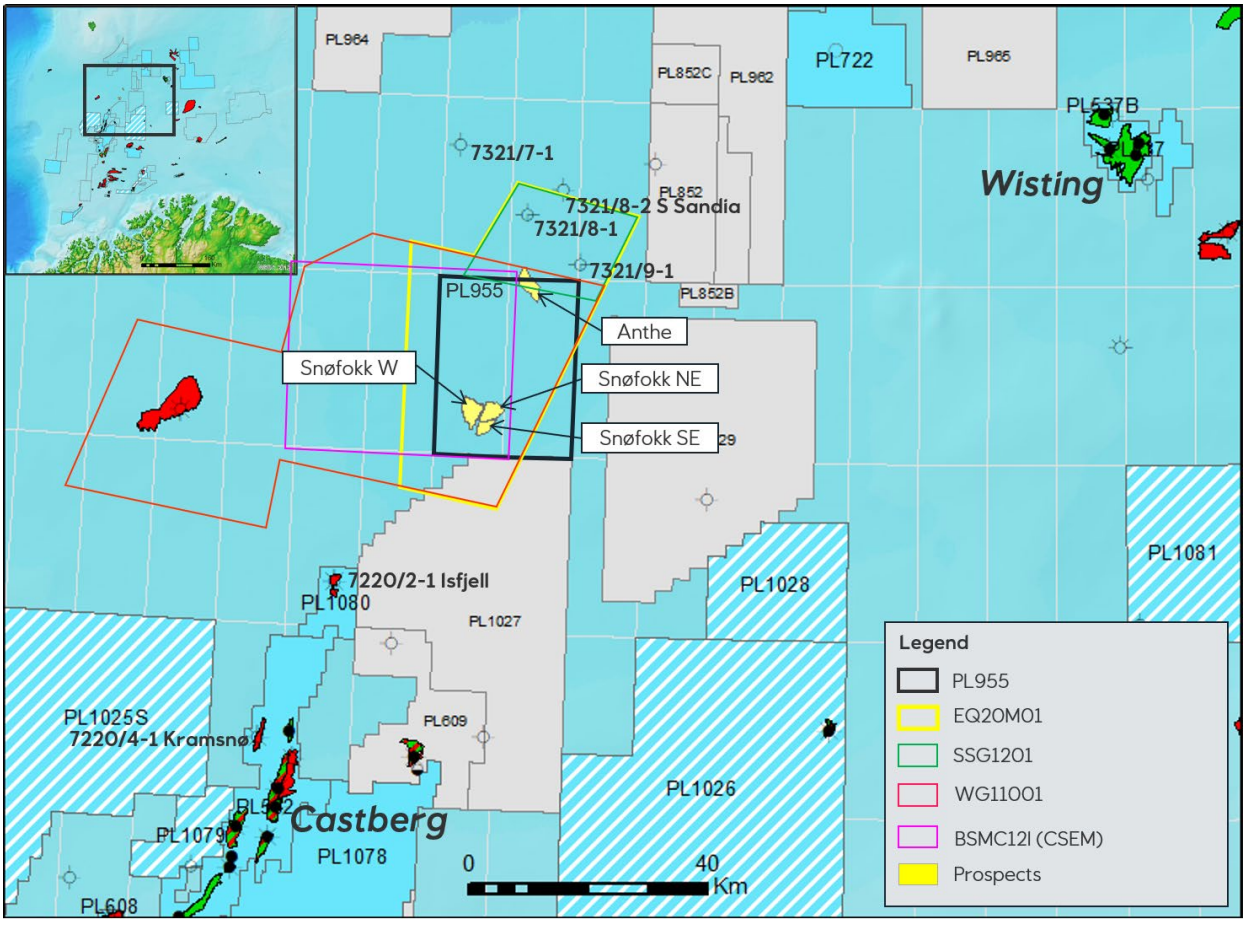

Figure 1: PL955 common 3D seismic and CSEM database

Table 1: PL955 common seismic database.

Survey Name	Survey Type	Operator	Year Acquired	Reprocessing	Area (km^2)	Quality
WG1101	3D	WG	2011	N/A	893 (eastern part)	Fair
SSG1201	3D	Geotrace	2012	N/A	306.6 (northern part)	Fair
EQ20M01	3D	CGG	Merge of above	2019-2020	1126	Good

Table 2: Overview of the EQ20M01 seismic volumes utilized for evaluation of prospectivity.

Survey Name	Migration	Volumes	Area (km^2)	Comments
EQ20M01	PSDM	Full stack depth	1121	0-42 °
EQ20M01	PSDM	Full stack time	1121	0-42 °
EQ20M01	PSDM	Near stack time	1121	8-20 °
EQ20M01	PSDM	Mid stack time	1121	20-32 °
EQ20M01	PSDM	Far stack time	1121	32-44 °
EQ20M01		Vertical velocity	1121	Depth time conversion

The common well database for PL955 includes all the relevant wells in the Barents Sea. An overview of most relevant wells in the common data base is shown in *Table 3* and key reference wells are highlighted in *Figure **1***. Wells in the Johan Castberg region were utilized for reservoir and depositional model while 7321/8-1 and 7321/9-1 were tied to the new EQ20M01 seismic volume.

Table 3: The common well database for PL955 which includes all the released and relevant wells in the Barent Sea.

Well Name	Operator	Year	TD MD (m)	TD Fm	Comments
7321/7-1	Mobil Exploration	1988	3550	Snadd	Dry well – gas filled Snadd sand
7321/8-1	Norsk Hydro	1987	3482	Røye	Dry well with residual shows
7321/9-1	Norsk Hydro	1988	1800	Snadd	Dry well with residual shows
7321/8-2 S T2	Spirit Energy	2020	1899	Late Triassic	Dry well
7220/2-1 Isfjell	Statoil	2014	1594	Snadd	Gas discovery in Stø and Nordmela
7220/4-1 Kramsnø	Statoil	2014	3240	Snadd	Gas discovery in Stø and Nordmela
7220/5-2 Nanatak	Statoil	2013	1780	Tubåen	Gas discovery in Knur
7220/5-1 Skrugard	Statoil	2012	1740	Fruholmen	Appraisal. Oil and gas discovery in Stø
7220/8-1 Skrugard	Statoil	2011	2222	Snadd	Oil and gas discovery in Stø and Nordmela
7220/7-1 Havis	Statoil	2012	2230	Fruholmen	Oil and gas discovery in Stø and Nordmela
7220/7-2S Skavl	Statoil	2013	1855	Snadd	Oil and gas discovery in Tubåen, oil discovery in Fruholmen
7220/7-3S Drivis	Statoil	2014	2097	Fruholmen	Oil and gas discovery in Stø and Nordmela
7219/9-1 Råk	Norsk Hydro	1988	4300	Snadd	Shows in Stø
7219/8-2 Iskrystall	Statoil	2013	3425	Fruholmen	Gas discovery in Stø and Nordmela

The common CSEM database contained 120 receivers of the BSMC12I survey. The survey covers the original main regions of interest for prospectivity within the licence and can be seen in *Figure **1***.

3 Results of geological and geophysical studies

Table 4: Overview of studies completed in the licence and their respective documentation

Study	Documentation	
	Meetings	Reports
Seismic Reprocessing	ECMC 05.02.2018,ECMC 27.11.2018, ECMC21.22.2019, ECMC 10.06.2020	CGG(2020)
AVO Study	ECMC 10.06.2020	
CSEM Inversion	ECMC 10.06.2020	
Structural Geology Study	ECMC 10.06.2020	

Results: Seismic Reprocessing

CGG was contracted to generate a reprocessed merged survey, known as EQ20M01, which contained 893 km^2 of the eastern aspect of WG1101 (processed in 2011 by WG) and the northern 306.6 km^2 of SSG1201 (processed in 2012 by Geotrace) in the Bjørnøyrenna Fault Complex in the Barents Sea. The main objectives were to increase data quality, as issues such as fault shadows, shallow gas disturbances, multiples, and complex fault geometries were present, as well as allow for a direct seismic tie to the two wells to the North of the licence, 7321/9-1 and 7321/8-1. The project utilized the EVO style workflow, which involves several iterative stages for migration and velocity model building.

Overall, the end survey was a well merged seismic volume that covered the majority of the licence and the closest wells to the north. Deghosting algorithms improved the overall bandwidth and allowed for more sharply defined areas with the increased low frequency content. The multiple energy, particularly endemic within the SSG1201 region, was attenuated to increase the signal to noise ratio, although poor signal to noise regions still remain within the volume which are likely related to geology. The iterative velocity model building process allowed for the imaging to improve throughout resulting in a more confident placement of deeper structures and faulting.

The final deliveries were:

- raw and final PSDM gathers in time and full (0-42), near (8-20), mid (20-32), and far (32-44) raw and final in time and depth.

Results: Seismic Welltie

Seismic welltie between seismic survey EQ20M01 and the wells within the survey (7321/8-1 and 7321/9-1) have been performed. Further a visual tie to well 7321/8-2 ST2 (Sandia, drilled by Spirit during Summer 2020) has been done. This well is located just 700m north of the EQ20M01 boundary, but is covered by survey SSG1201.

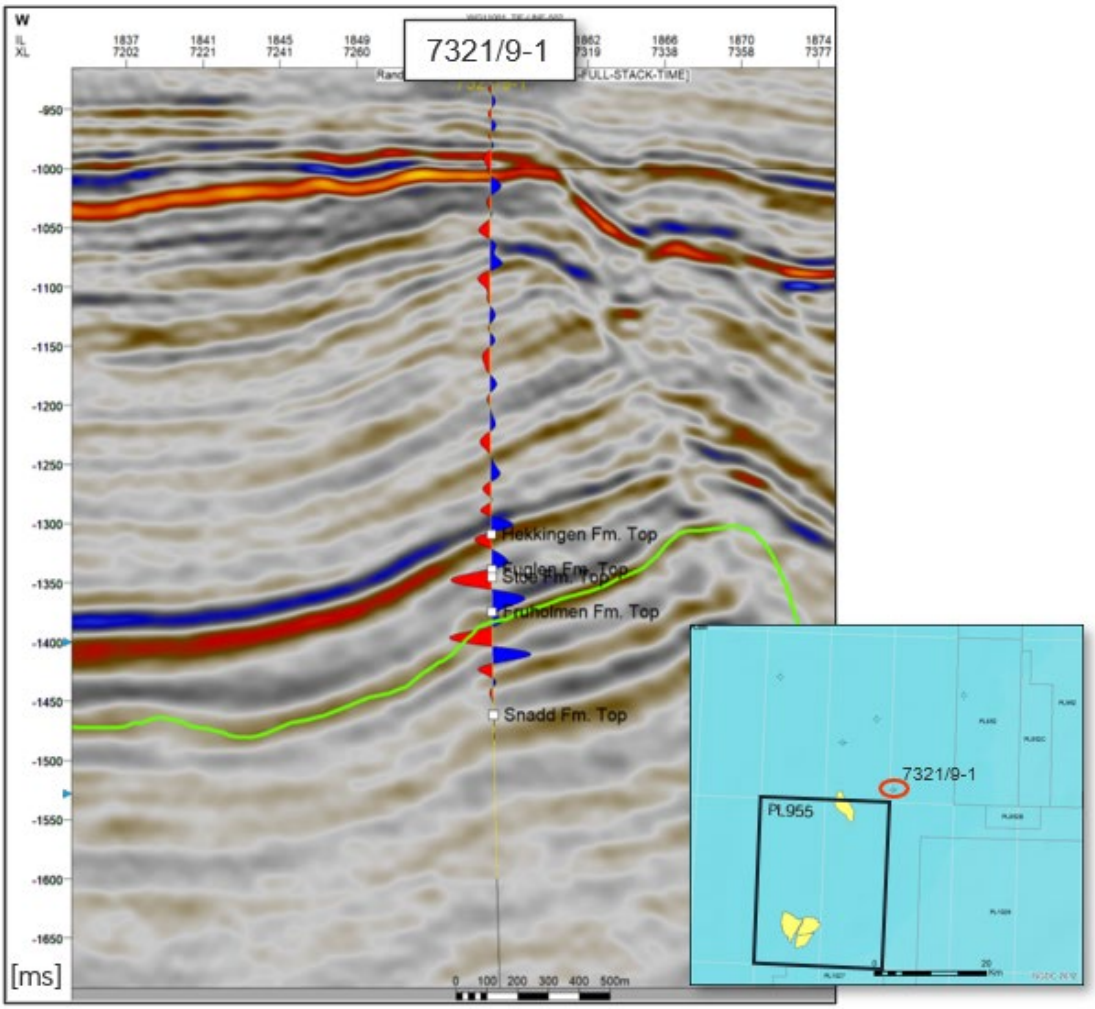

Figure 2: Seismic welltie to well 7321/9-1 on the EQ20M01 full stack. Green horizon is top reservoir.

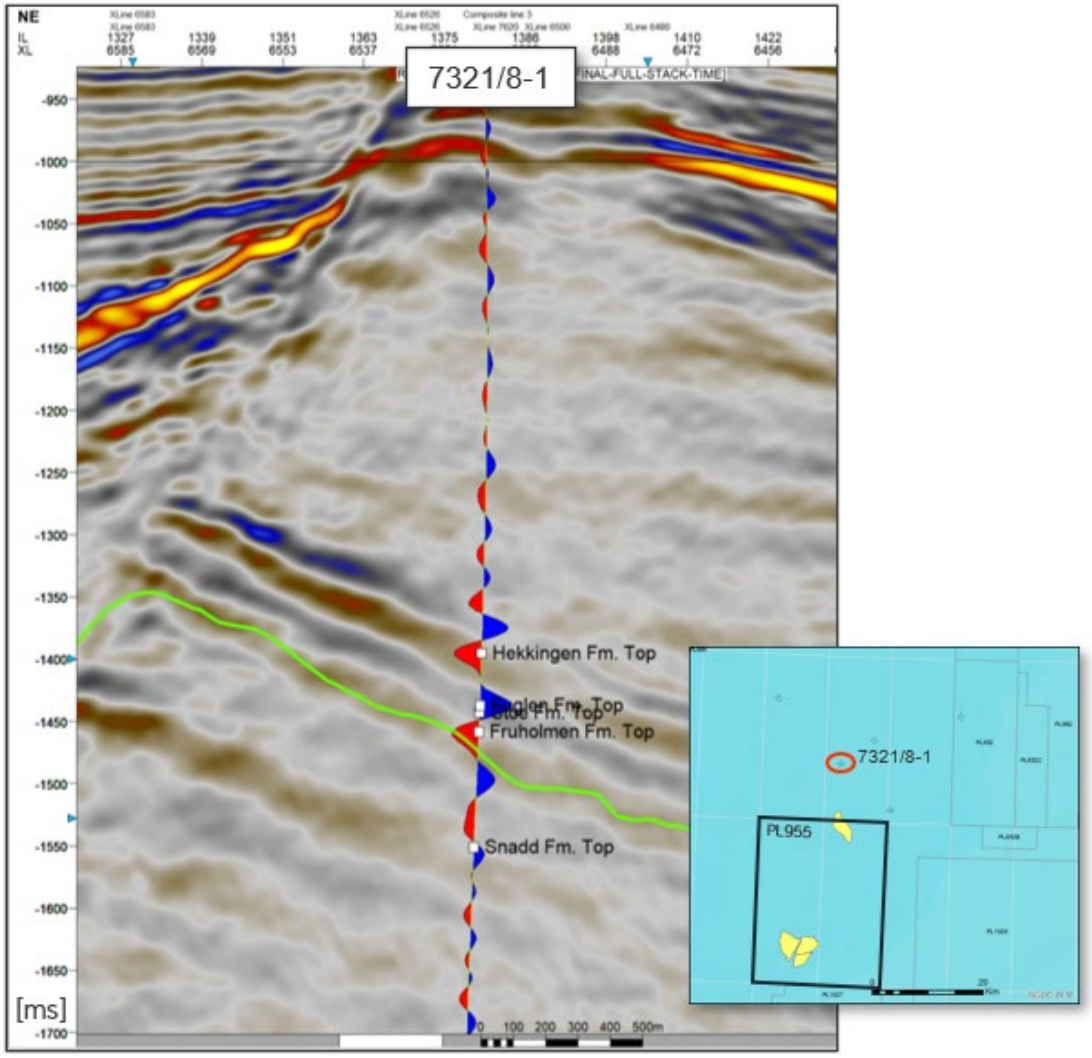

Figure 3: Seismic welltie to well 7321/8-1 on the EQ20M01 full stack. Green horizon is top reservoir.

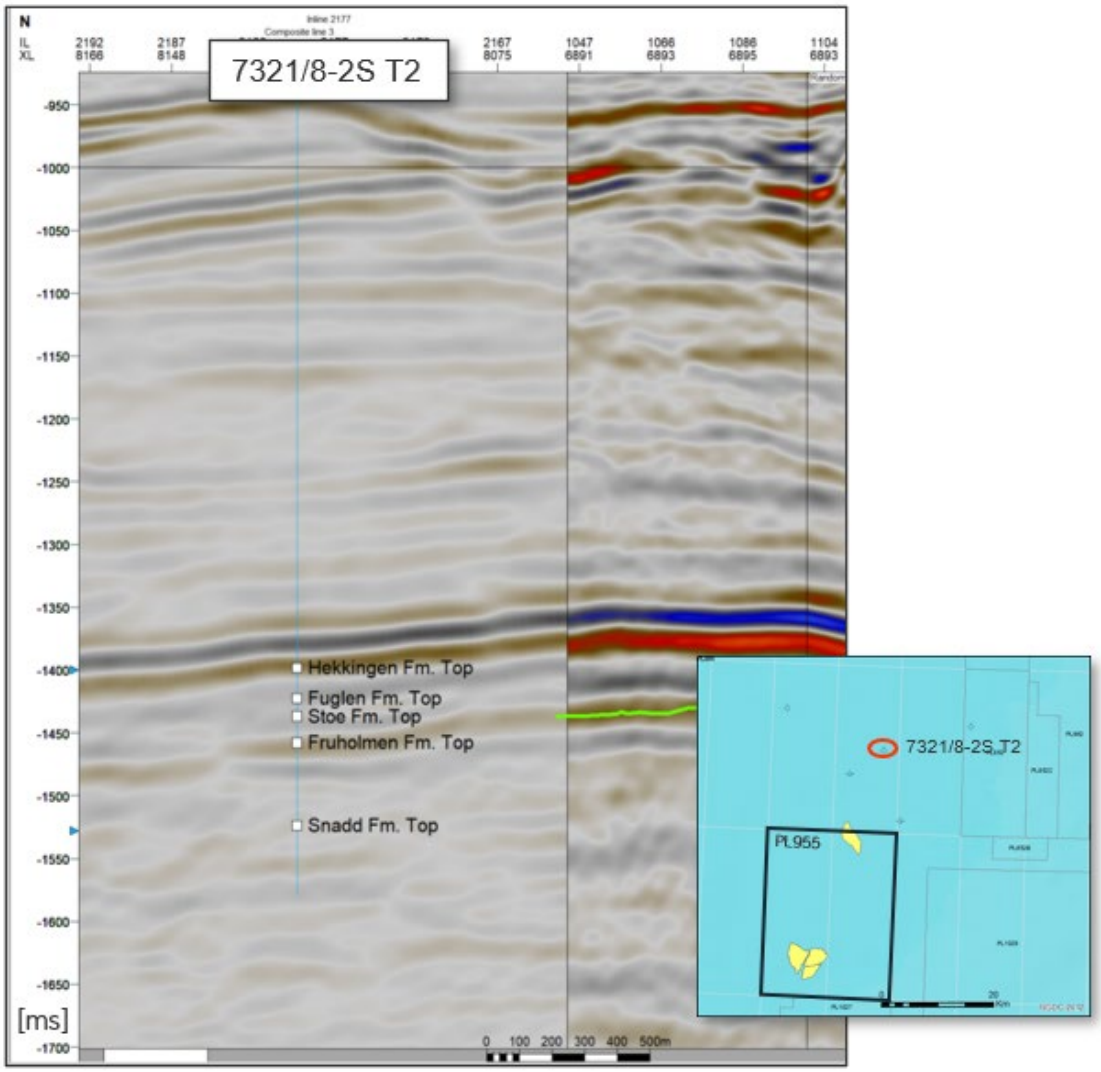

Figure 4: Seismic welltie to well 7321/8-2 ST2 (Sandia) on the older SSG1201 survey Full stack. Green horizon is top reservoir.

In general the tie within the target zone (Top Hekkingen, Fuglen, Stø and Fruholmen formations) is good and consistent for the three wells covered. It clearly shows that the first good trough below the Hekkingen and Fuglen package corresponds to the Top Fruholmen well pick (Top Fruholmen is the green horizon plotted on welltie figures).

Results: Structural geology and top seal Study

A detailed structural interpretation has been performed, generally confirming the previous interpretations and adding detail and adjustments in the Snøfokk area due to improved seismic imaging of both horizons and faults. Faulting patterns are predominantly NE-SW striking for the eastern prospects. A high number of internal faults with moderate throw within the Snøfokk Northeast provides the potential for sealing and internal compartmentalization within the prospect. However, the interpretation of the reprocessed seismic data revealed that there is no clear fault separating Snøfokk Northeast from Southeast, resulting in a continued high risk on fault seal. Indications of HC leakage along overburden faults are also seen, as are high reflectivity seismic within the top seal. As such the quality and thickness of the top seal is seen as an issue for Snøfokk Northeast and Southeast.

A mixture of multiple fault orientations, predominately N-S and E-W, are seen within Snøfokk West, which is defined by three bounding faults. Furthermore, Snøfokk West is expected to have the most robust top seal as the package above the expected reservoir contains minimal high reflectivity packages and is expected to be composed of mainly shales.

Results: AVO

An AVO study was completed over the PL955 licence utilising the EQ20M01 seismic volumes which investigated both the initially defined Snøfokk prospects and the remainder of the seismic coverage. The AVO response of Hekkingen, which is easily interpreted north of the initial prospects, was as expected for a source rock. Although higher amplitude regions can be seen on the angle stacks within the Cretaceous which gave birth to several potential leads initially, no AVO response was seen throughout the licence inside Kolje. A laterally constrained weak AVO response was seen in the Lower Knurr formation in the approximate middle of the licence in a down faulted block. However, this has a very small spatial footprint and has negligible volume potential.

Due to the shallow depth of the Snøfokk prospects, the angle stacks were utilized with caution within the AVO work. There is no mid angle information above 950ms, and the angle stack ranges are not suitable for depth above 1150 ms. Strong indications of gas hats are seen within Fruholmen Fm. in Snøfokk Southeast, and a weak shut-off is seen in Snøfokk Northeast at 1300ms, within thin sands of the Snadd Fm (*Figure 6*). Optical stacking did not illuminate any flat spots.

In the northern region of the licence, there is a strong class 3 up dip and strong class 2p AVO anomaly present at Realgrunnen level in the Anthe prospect (***Figure 5***). The work suggests that Anthe either sits in a more quartz rich region than the wells to the north, or more likely in an area with more abundant quartz cementation which is expected at this depth. Two depth conformant AVO shut-offs are visible, suggesting either a multiphase deposit with a gas hat and oil leg or more likely a change in reservoir properties. Regional trends suggest the later, as Anthe is expected to have been deeply buried and would not have the porosity required to see oil. DFI risking has resulted in a slight uplift for a gas case and a downgrade for an oil case.

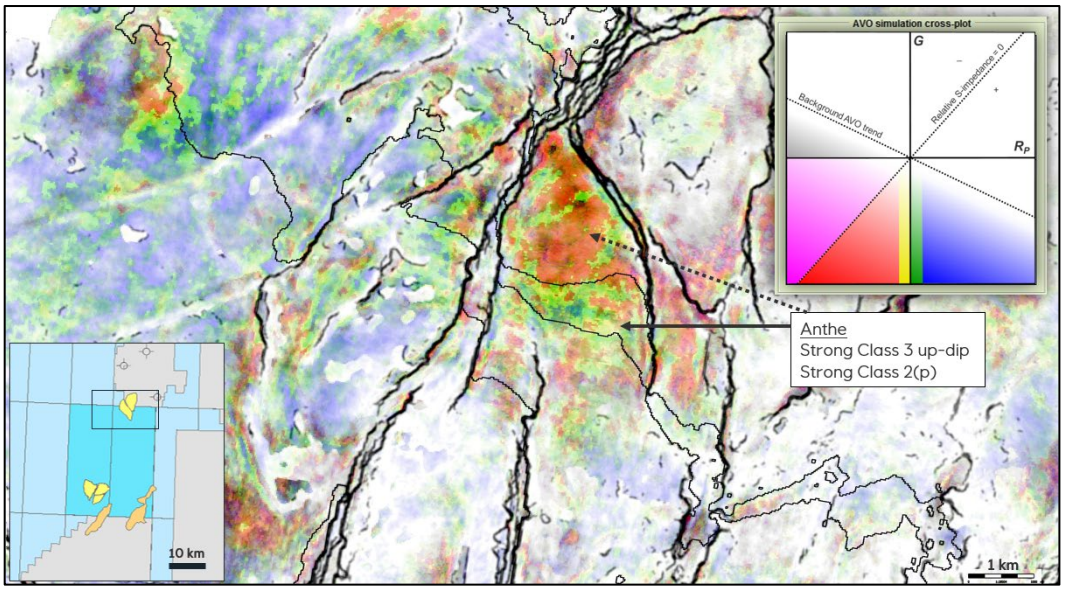

Figure 5: AVO classification composite map, top to base of Anthe anomaly.

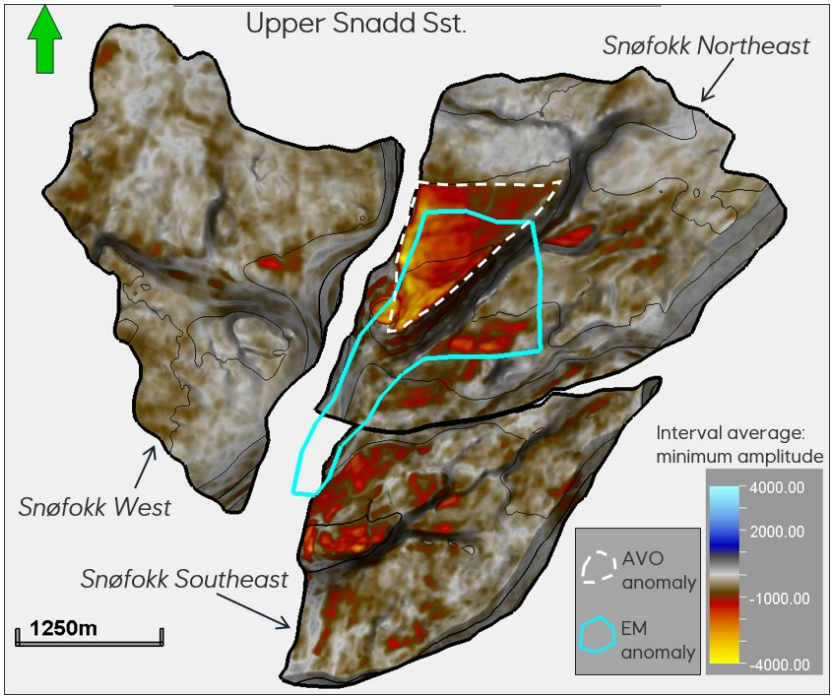

Figure 6: Amplitude map of Upper Snadd sandstone.

Results: CSEM Inversion

A new 3D Gauss-Newton inversion was completed on the purchased CSEM data in the region, but this only provided a minor improvement from the work previously completed in 2017. A persistent anomaly within the

Snøfokk Northeast prospect can be seen across the generations of CSEM inversions at moderately different, but near to the same general location. [redacted]

4 Prospect update report

Source and migration

The PL955 is located at the triple point meeting of the Fingerdjupet Sub-basin, Loppa high, and Bjørnøyrenna fault complex and is considered to be in a favourable migration location with several routes across the licence. The assumed basin wide presence of Hekkingen source rock is expected to be both oil and gas mature.

The closest discovery to the prospects, 7220/2-1 Isfjell, is a gas discovery over a thin 2 m live oil leg within Realgrunnen Stø and Nordmela formations, with oil shows down to the structural spill. Two phases of charge are interpreted. Gas analysis showed that the gas was thermogenic in origin and had no signs of biodegradation. The nearest wells to the licence, 7321/8-1 and 7321/9-1, both are reported to have hydrocarbon shows and additionally many shallow gas anomalies can be seen within the seismic volumes.

Organic geochemical studies were completed on both 7321/7-1 and 7320/2-1 which suggested that the source rock in the region was mature for petroleum generation in the Adventdalen Group to highly mature in the Kapp Toscana Group.

The primary target reservoir interval for the licence was the Stø/Nordmela/Tubåen formations of the Realgrunnen Subgroup, which was penetrated in the three nearest wells to the north. The best interval in 7321/8-1 held fine-medium grained sandstones, interbedded with shales to give 92m of net water bearing sand in the well. The porosity of this best interval averaged to be 17,8%. Well 7321/9-1 encountered 35,8m of water bearing net sand in 116m of reservoir rock. 7321/7-1 reservoir has low porosity and poor permeability and only very weak shows in Stø were recorded.

Snøfokk Southeast and Northeast

The main prospects within the license, the Snøfokk prospects, sit on the edge of a long-lived fault zone with multiple phases of reactivation (***Figure 7***). The Snøfokk Northeast and Southeast prospects are located adjacent to a step in the main fault of the Bjørnøyrenna Fault Complex, on a breached relay ramp with the Snøfokk Northeast prospect being bounded by faults on all four sides, and the Snøfokk Southeast having three bounding faults. Location of prospects are shown in *Figure **1*** and ***Figure 7***

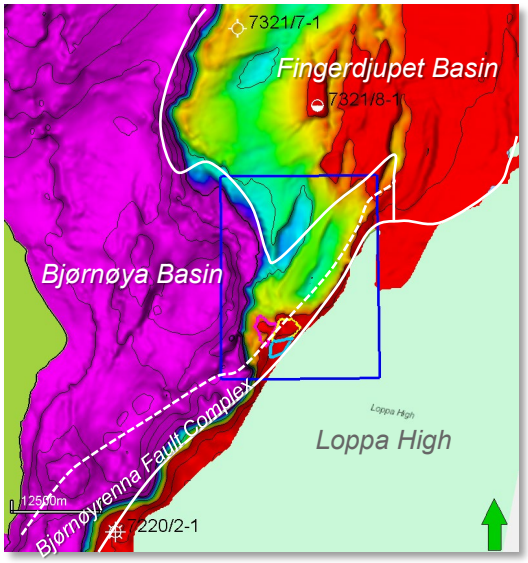

Figure 7: The geological domains near PL955. Snøfokk prospects indicated with yellow, blue and purple polygons in the southern part of the license area.

The reservoir was previously expected to comprise of Stø, Nordmela and Tubåen formations of the Realgrunnen Subgroup. However, new seismic and structural interpretation revealed that the Snøfokk prospects have been subjected to much deeper erosion. The reservoir formations have been completely eroded. Only Fruholmen Formation of the Realgrunnen Subgroup has been partly preserved in the Snøfokk area, leaving poor reservoir potential. Due to poor seismic imaging in the Snøfokk area, the interpretation strategy was to make a jump tie from the north across faults into the Snøfokk prospects using a consistent seismic marker within the upper Snadd Formation, and interpretation of overlying stratigraphy is based on correlation of formation thicknesses seen north of Snøfokk. Regional geological understanding of both tectonic activity and sedimentation patterns supports the assumption that the thicknesses of upper Snadd Formation and the Fruholmen Formation should not have any abrupt variations across faults in this area. As a concequence, preservation of upper members of the Realgrunnen Subgroup within the Snøfokk area is considered highly unlikely due to the limited space above the seismic marker.

The structural geological work has revealed more complex faulting and a high chance of internal segmentation and internal compartmentalisation. There are no mappable bounding faults along the westernmost part of the boundary between Snøfokk Southeast and Northeast resulting in a continued high risk on trap seal. High reflectivity through the entire top seal suggest the possibility for sand inclusions and trap seal issues.

Both the AVO and EM anomalies sit within the pre-defined Snøfokk Northeast prospect, although at different stratigraphic levels and with a lateral shift between them (*Figure 6*). While the EM anomaly sits near to where previous inversion has placed it, it does not conform to structure. Additionally, as there is no mappable

bounding fault separating Snøfokk Northeast from Southeast after interpretation of the reprocessed seismic data, the location of the anomaly is even more difficult to explain than previously when it was thought to terminate against the bounding fault.

Snøfokk Northeast - Snadd

The depth conformant AVO anomaly is seen within the Triassic Snadd formation but there is no accompanying flat spot visible on the seismic. As such, this is interpreted to be a thin, hydrocarbon filled sand layer. This has been seen in the region as a 5.5 m thick Snadd sand that was gas bearing but had low permeability, encountered in well 7321/7-1. The three remaining closest wells (7321/9-1, 7321/8-1, and 7320/2-1), however, all reported the Snadd Formation as water bearing with no hydrocarbon indications. Suggestions of channels and sheet sands are also seen within Snadd in Snøfokk Northeast.

Volumes has been calculated for the Upper Snadd sands within the fault block with the amplitude anomaly (*Figure **6***) to illustrate any volume potential, assuming that the container is filled to the depth of the amplitude shut-off .

Snøfokk West

The new interpretation completed in 2020 suggests that Snøfokk West holds little prospectivity as the main reservoir interval is nearly completely eroded and no AVO or EM anomalies are seen. The down faulted prospect also does not have the seismic indications of channel or sheet sands as seen within the eastern prospects. Snøfokk West is no longer regarded as a prospect, and volumes are not calculated.

Anthe

The Anthe prospect was identified as a lead at the time of application and matured to a prospect during the license period. The prospect is a well defined down-thrown fault block with AVO class 2 and 3 response from sands within the Fruholmen Fm. Stø, Nordmela and Tubåen formations are masked by the hard response from top Fuglen Fm. The reservoir quality is expected to be of low porosity and permeability due to deep maximum burial depth and likely quartz cementation.

Volume, risk and reservoir- and fluid parameters for all prospects evaluated within PL955 are listed in *Table 5*, *Table 6* and *Table **7***.

Table 5: Prospect risking

Block no	Prospect segments	P-Prospect/Segment								Discovery				
		Reservoir		Source			Trap		HC phase risk (oil/gas/oil&gas)	Pg apriori	Pg (DHI)	Poil only (DHI)	Pgas only (DHI)	Poil+gas (DHI)
		pre-sence	produc-ibility	pre-sense	migra-tion	HC - phase	geo-metry	seal						
7321/10	Snøfokk Northeast - Fruholmen	0.8	1	1	0.8	1	1	0.2	0.2/0.3/0.5	0.128	0.101	0.022	0.028	0.051
	Snøfokk Northeast - Snadd	0.5	1	1	0.8	1	1	0.3	0.4/0.6/---	0.12	0.147	0.051	0.096	0
	Snøfokk Southeast - Fruholmen	0.7	1	1	0.8	1	1	0.3	0.2/0.3/0.5	0.168	0.211	0.035	0.066	0.11
	Anthe - Fruholmen	1	1	1	0.8	1	1	0.3	0.2/0.3/0.5	0.24	0.286	0.044	0.112	0.13

Table 6: Volume potential – pure oil cases

Block no	Prospect segments	Pure oil cases						Pure gas cases						Pg apriori	Pg (DHI)	Poil only (DHI)	Pgas only (DHI)
		Oil in place [MSm³]			Recoverable oil [MSm³]			Gas in place [GSm³]			Recoverable gas [GSm³]						
		P90	Mean	P10	P90	Mean	P10	P90	Mean	P10	P90	Mean	P10				
7321/10	Snøfokk Northeast - Fruholmen	1.65	5.27	10.2	0.482	1.57	3.05	0.2	0.619	1.2	0.113	0.36	0.704	0.128	0.101	0.022	0.028
	Snøfokk Northeast - Snadd	2.38	5.63	9.1	0.698	1.69	2.78	0.28	0.663	1.08	0.16	0.385	0.632	0.12	0.147	0.051	0.096
	Snøfokk Southeast - Fruholmen	1.69	6.02	11.4	0.495	1.81	3.49	0.198	0.698	1.35	0.113	0.406	0.8	0.168	0.211	0.035	0.066
	Anthe - Fruholmen	9.34	15.2	21.7	3.15	5.36	7.84	2.71	4.41	6.35	0.914	1.54	2.28	0.24	0.286	0.044	0.112

Table 7: Reservoir and fluid parameters

Prospect segment	Snøfokk Northeast - Fruholmen			Snøfokk Northeast - Snadd, one container filled to AVO shut-off @ 1300ms			Snøfokk Southeast - Fruholmen**			Anthe - Fruholmen		
	P90	Mean	P10	P90	Mean	P10	P90	Mean	P10	P90	Mean	P10
Apex		820			1030			700			1965	
Reservoir thickness	19.3	31.9	45.2		600		19.3	31.9	45.2	49.7	60	70.3
HC column	147	222	297	372	395	418	70	128.5	204.7	272.8	300.4	324.5
Area	4.74	5.96	9.17	2.35	2.78	3.21	3.55	4.47	5.38	6.94	8.21	9.47
Net to gross	0.263	0.4	0.537	0.02	0.055	0.09	0.263	0.4	0.537	0.346	0.5	0.654
Porosity	0.201	0.234	0.266	0.243	0.28	0.314	0.201	0.234	0.266	0.109	0.13	0.151
Water saturation	0.09	0.15	0.2	0.09	0.15	0.2	0.09	0.15	0.2	0.274	0.341	0.724
1/Bg	102.3	106.3	110.9	102.3	106.3	110.9	102.3	106.3	110.9	192.3	200	207.7
1/Bo	0.887	0.905	0.923	0.887	0.905	0.923	0.887	0.905	0.923	0.719	0.74	0.761
Condensate yield	12.5	14.6	16.6	12.5	14.6	16.6	12.5	14.6	16.6	51.5	68.8	87.6
GOR, oil	41.8	46.2	50.6	41.8	46.2	50.6	41.8	46.2	50.6	112.2	125	137.8
Recovery factor, oil	0.249	0.3	0.351	0.249	0.3	0.351	0.249	0.3	0.351	0.299	0.35	0.401

**assuming same reservoir thickness as in Snøfokk Northeast

Remaining prospectivity

There is little prospectivity left within reservoirs of the Realgrunnen Subgroup. The main prospects have been evaluated and are mentioned in this report. Other closures comprising of Realgrunnen reservoirs are too small to be of interest, and have also been deeply buried and are expected to have low porosity and permeability.

The Cretaceous leads identified at the time of license application are no longer considered prospective due to limited reservoir development (*Figure 8*).

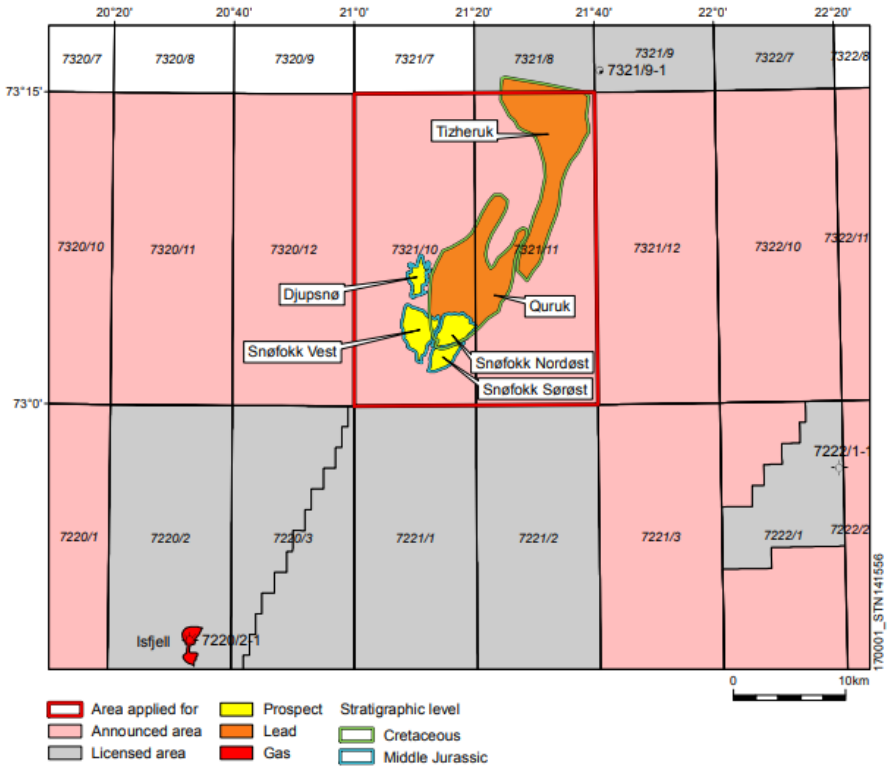

Figure 8: Overview map from license application, APA2017 showing identified prospects and leads.

5 Technical evaluation

The prospects identified during licence maturation have limited hydrocarbon potential. It is expected that a tie-in development to Castberg would require a MEV 7.1 MSm^3 of recoverable oil while a stand-alone or cluster development would need a MEV 22 MSm^3 of recoverable oil. Given that the P10 volumes are far below the threshold for any commercial interest in this area, no business case has been made.

6 Conclusion

PL955 was obtained through the 2017 APA round covering blocks 7321/10 and 7321/11 and is situated 68km northeast of Johan Castberg. A cluster of prospects on and adjacent to a step in the main fault of Bjørnøyrenna Fault Complex in the Barents Sea have undergone a new technical evaluation in 2020 spurred on by the work commitment to merge and reprocess 3D seismic data over the licence. The overall quality of the seismic data has improved in aspects such as multiple energy and signal to noise ratio, and this data set was used to complete the reinterpretation, AVO study, and structural and fault seal work.

The technical work completed in 2020 has resulted in a less positive outcome for commercial hydrocarbons in the region. Top reservoir for the Snøfokk cluster is expected to be a thin lower Realgrunnen and Snadd sands, the latter being the stratigraphic location of a weak AVO shut off. Structural complexity also lends to the expectation of internal compartmentalization. The AVO work also highlighted the presence of Anthe, a deeply buried prospect with depth conformant anomalies. A new CSEM inversion was finalised but resulted in only minor improvements over previous work completed on the dataset.

No economically interesting drilling candidates are identified within PL955, and the partnership has therefore agreed to relinquish the licence.

7 References

CGG (2020). Final Report for PL955 PRESDM