



## **PL 1127 Licence status report**

---

## Table of contents

1	History of the production licence.....	3
2	Database.....	4
2.1	Seismic data.....	4
2.2	Well data.....	4
3	Results of geological and geophysical studies.....	5
3.1	Framework review of prospective intervals in the Træna Basin.....	5
4	Prospect update report.....	7
5	Technical assessment.....	11
6	Conclusions.....	12
7	APPENDIX.....	13

## 1 History of the production licence

<b><u>Licence:</u></b>	PL 1127	
<b><u>Awarded:</u></b>	19.02.2021	
<b><u>Licence period:</u></b>	Expires: 19.02.2030 Initial period: 9 years	
<b><u>Licence group:</u></b>	Equinor Energy AS	70% (operator – 50% equity from award to 30.11.2022)
	Total Energies EP Norge AS	30%
	DNO Norge AS	20% until 30.11.2022 (Equity transferred to Equinor)
<b><u>Licence area:</u></b>	4037 km <sup>2</sup>	
<b><u>Work programme:</u></b>	Decision to acquire new 3D seismic, initially by 19.02.2022 Extension to 19.12.2022, main reason: prospect maturation	
<b><u>Meetings held:</u></b>	09.04.2021	EC/MC meeting
	28.04.2021	MC meeting
	16.09.2021	EC work meeting
	10.11.2021	EC/MC meeting
	04.11.2022	EC/MC meeting
<b><u>Work performed:</u></b>	2021: Technical-Economical considerations for the Leia prospect. Framework review of prospective intervals in the Træna Basin.	
	2021: Prospect evaluation of the Andøya leads.	
	2022: Prospect evaluation of the Bobcat prospect.	

### **Reason for lapse:**

Equinor and PL1127 licence partners have not been able to identify an attractive drilling candidate in the licence or justify the acquisition of new 3D seismic data in the licenced area based on the identified prospectivity. Due to long distance to infrastructure and limited discoveries in the area, significant volumes are needed to develop future discoveries in the area. The identified and evaluated prospects in the licence are associated with low probability of discovery and insufficient volume potential. The decision to not pursue acquisition of new 3D seismic was unanimous.

## 2 Database

### 2.1 Seismic data

The common seismic database in the licence consisted of a selection of key 2D seismic lines (Table 2.1, Figure 4.2). The 2D data is of poor quality in the Træna Basin but has been used to define prospects and leads in the area. The MNR surveys have been reprocessed several times. Despite efforts to improve the 2D data, the thick Cretaceous sediment package in the Træna Basin remains poorly imaged with limited reflectivity and high noise content.

#### 2D seismic database

MNR05	476	MNR08	546
MNR06	7404	MNR08	7424B
MNR06	7424	MNR10	494
MNR07	7392	MNR10	7392
MNR08	506	TBS2000	206

**Table 2.1 Seismic database.**

### 2.2 Well data

The common well database comprises the 6611/1-1 (Toutatis) well and publicly available data from released wells listed in table 2.1. The list include well name, NPDID number, completion year, results and formation at TD.

Well	NPDID	Year	Result	Age at TD
6608/2-1S	7192	2013	Dry	Late Cretaceous
6607/5-2	1789	1991	Dry	Late Cretaceous
6607/5-1	1064	1987	Dry	Late Cretaceous
6710/10-1	3941	2000	Dry	Late Cretaceous
6609/5-1	445	1985	Shows	Middle Triassic
6609/6-1	5626	2007	Dry	Late Triassic
6610/2-1S	2874	1996	Shows	Triassic
6610/3-1	1864	1993	Shows	Late Cretaceous
6609/7-1	19	1983	Dry	Permian
6610/7-2	26	1984	Dry	Early Triassic
6608/6-1	8777	2019	Dry	Permian
6611/1-1	8887	2019	Oil	Triassic

**Table 2.2 Well database**

---

### 3 Results of geological and geophysical studies

The following geological and geophysical studies were carried out in the licence evaluation:

- Framework review of prospective intervals in the Træna Basin.

#### 3.1 Framework review of prospective intervals in the Træna Basin.

The Træna Basin was the focus area for acquisition of new 3D seismic data. The basin is flanked by the Utgard High to the west and Nordland Ridge to the east and is characterized by a thick Cretaceous succession with the Base Cretaceous unconformity buried more than 15 km in the axial parts of the basin. Early development of the Træna Basin is associated with a major phase of crustal extension during Late Jurassic/Early Cretaceous. Subsequent rapid subsidence and sedimentation persisted through the Cretaceous followed by renewed faulting and extension during the Late Cretaceous to Paleocene and culminating in Early Eocene crustal break-up between Fennoscandia and East Greenland. Sedimentation persisted through Eocene and Oligocene until Late Paleogene which is characterised by inversion and development of major Cenozoic dome structures and sub-basins. A final phase of rapid sedimentation in the Træna Basin is related to the progradation of Late Pliocene to Pleistocene glacial outwash.

Sandstones in the Springar Formation (Late Campanian to Maastrichtian) formed the primary reservoir unit in the area at the time of application with secondary reservoir potential in underlying sandstones within the Lange, Lysing, Kvitnos and Nise formations, and the overlying Rogaland Group (Paleocene-Early Eocene). Observations on seismic data also indicated additional reservoir potential in the Late Pliocene – Pleistocene Naust Formation.

The reservoir potential in the Træna Basin has been reviewed in the PL1127 licence period with focus on the Campanian to Pleistocene successions.

##### **Campanian:**

Early Campanian Nise Formation sandstones sourced from the Vestfjorden Basin are present as submarine channel- and fan-deposits in the outer Vestfjorden Basin transitioning into the Træna Basin. There are however few indications that these sands extend towards southwest and the Træna Basin. An episode of intra-Campanian platform elevation and exposure can be inferred from truncation of strata on the northeastern part of the Trøndelag platform. No observations have however been made of basinward transfer of sand towards the Træna Basin linked to this event.

PL1127 covers the distal (western) part of these potential fairways and is considered unlikely to have presence of sand with significant amounts and quality.

##### **Maastrichtian:**

Maastrichtian development in the Træna Basin is poorly known. Potential sand fairways could be sourced from the Vestfjorden Basin dominated by mass transport deposits or sand transfer across the Trøndelag Platform. The adjacent platform area is seen to be mud dominated in this period, and no fairways are observed from the Vestfjorden Basin. Smaller sand transport systems are observed in the Ribban Basin in Late Cretaceous (likely Maastrichtian) which could be a source to the Træna Basin. PL1127 would in this case be located distally relative to these fairways. The presence of sand within the Maastrichtian succession is therefore considered unlikely in PL1127.

##### **Paleocene:**

The Paleocene succession has the highest potential for presence of sand in abundance and of good quality in the Træna Basin with a major sand fairway coming out of the Vestfjorden basin and bypassed into the Træna Basin (6710/10-1).

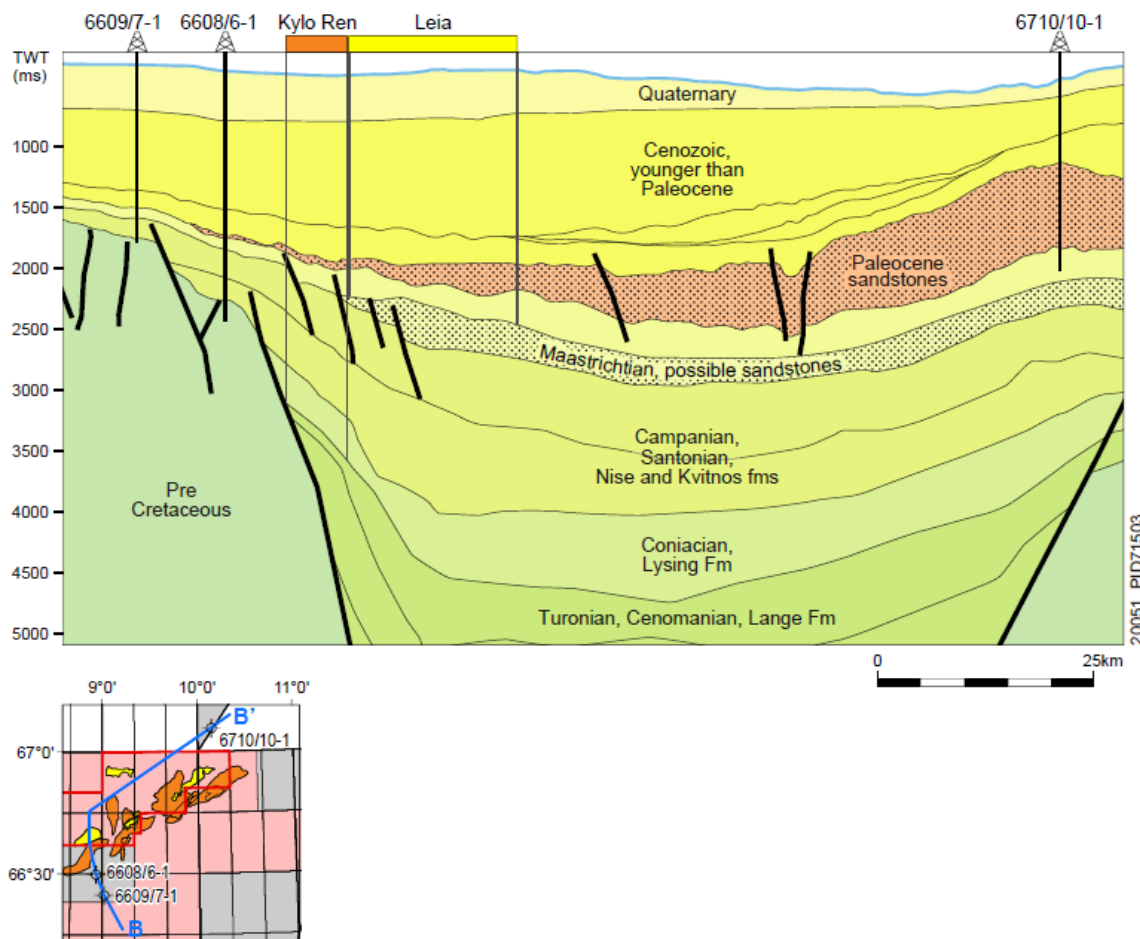
This sand system developed through time with relatively constrained accumulation along the basin axis with onlapping geometries in the early stages and more widespread deposition towards the later stages of fan development. Presence of sand away from 6710/10-1 can be inferred from thickness maps, with highest sand potential in the thicker accumulations associated with the early development of the system. In the thinner, more distal / off-axis, areas the presence of sand is believed to be lower. These areas are however also more challenging to resolve on the available seismic data. In the PL1127 area, presence of sand and quality is expected to decrease from northeast towards southwest.

**Eocene:**

The Eocene succession is believed to be less sand rich than the underlying Paleocene with basin floor fans coming out from the Vestfjorden Basin. Like in the Paleocene, sand presence and quality is expected to decrease from northeast towards southwest in the licence area, where the distal areas are likely to be dominated by mud- and silt-stone facies with little to no sand presence.

**Pleistocene:**

The Pleistocene Naust Formation is primarily composed of glaciomarine gravity flow deposits and contourites. The reservoir potential in these deposits is limited.



**Figure 3.1 Geoseismic section through the Træna Basin from application for award showing the stratigraphic intervals reviewed in the licence period.**

---

## 4 Prospect update report

### **Leia:**

The Maastrichtian Leia prospect (Springar Fm.) was the main prospect at the time of application for award. The prospect is defined as a stratigraphic closure mapped on poor quality 2D data with key risks attributed to reservoir presence and trap geometry. Work performed during the licence period has matured the reservoir understanding in the Springar Formation (See chapter 3.) and has, together with challenging development scenarios (See chapter 5.), resulted in a downgrade of Leia from prospect to lead.

### **Andøya prospects:**

Two Cretaceous opportunities have been evaluated during the licence period, Andøya Central and Andøya South. These opportunities are defined as Intra Lange Fm. stratigraphic pinch-out traps down-dip of 6609/6-1. Top reservoir/top seal is defined by volcanic sills which are clearly visible on seismic. This however also complicates the interpretation of potential sands below which is model driven. The main subsurface risks associated with these opportunities is reservoir presence (0.3) and trap (top) seal (0.4). Due to low discovery probability and the model-driven reservoir definition these opportunities are classified as leads.

### **Bobcat prospect:**

The Bobcat prospect located on the western margin of the Nordland Ridge has been evaluated in the PL1127 licence period. The prospect is defined as a structural truncation trap below the Base Cretaceous Unconformity (BCU). Two reservoir models were considered due to challenges with interpretation and seismic tie. The most likely model is that the reservoir is of Triassic age (Upper Grey- or Red-beds) with relatively poor reservoir properties. The alternative interpretation associates the reservoir with the lower Åre Formation which is believed to have significantly better reservoir quality. Despite the uncertainty related to reservoir quality, trap seal (0.56) and migration (0.50) is considered the main risks for the Bobcat prospect with potential Cretaceous thief sands onlapping BCU (top reservoir) and with absence of shows in the up-dip 6609/6-1 well. At the time of lapse for PL1127 Bobcat is considered the main remaining prospect in the licence.

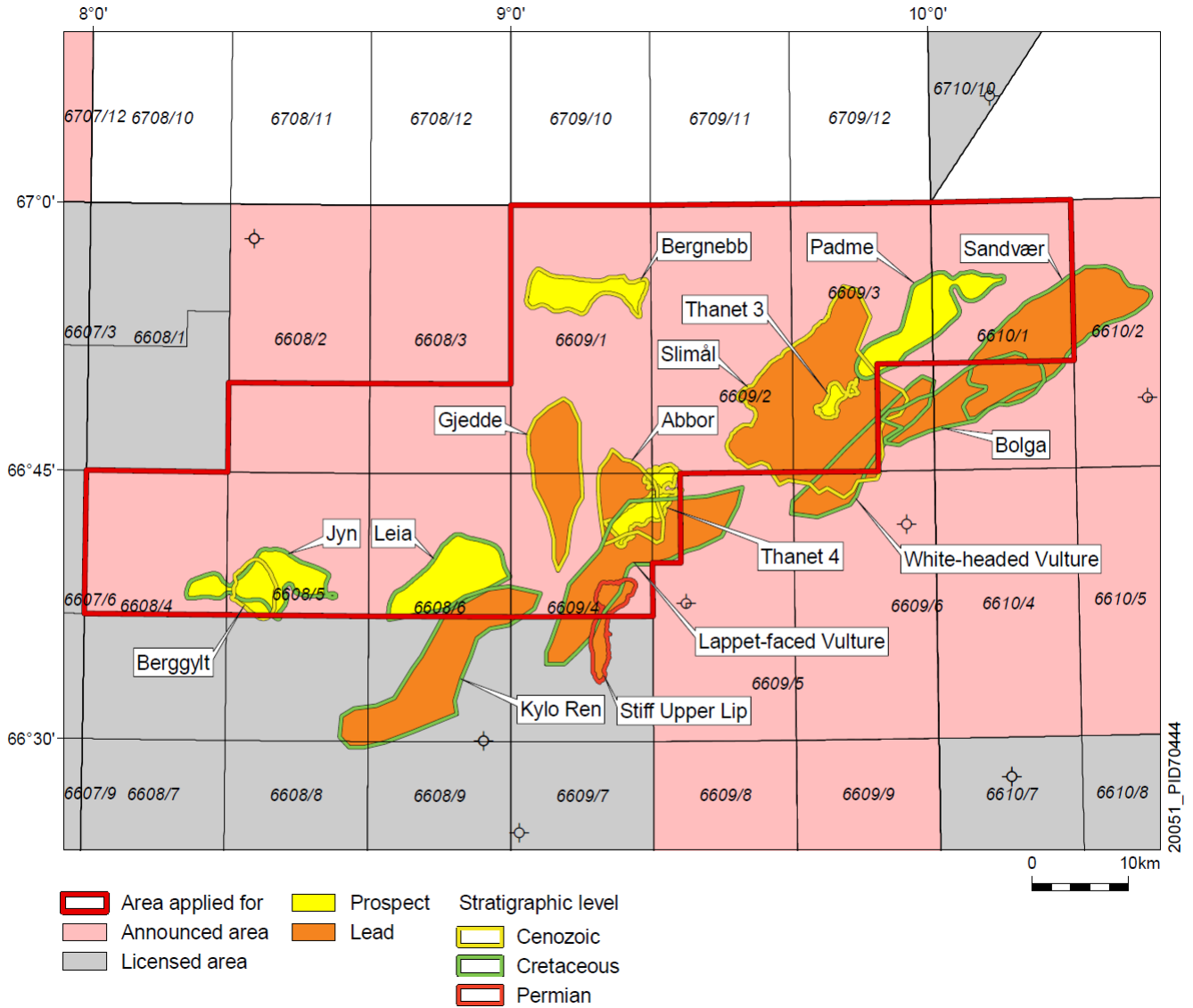


Figure 4.1 Overview map with prospect/leads indicated from application for award.



Discovery/ Prospect/Lead name	D/ P/ L	Case (Oil/ Gas)	Unrisked recoverable resources						Probability of discovery (0.00 - 1.00)	Reservoir	
			Oil [10 <sup>6</sup> Sm <sup>3</sup> ]			Gas [10 <sup>9</sup> Sm <sup>3</sup> ]				Litho-/ Chrono- stratigraphic level	Reservoir depth [m MLS]
			Low (P90)	Base (Mean)	High (P10)	Low (P90)	Base (Mean)	High (P10)			
Leia	P	Oil	2.78	24.54	58.96	0.13	1.22	2.95	0.01	Springar Fm/Cretaceous	2408
		Gas	0.09	0.82	1.98	2.03	16.38	39.54	0.05		
Jyn	P	Oil	1.67	3.32	5.47	0.07	0.17	0.29	0.02	Springar Fm/Cretaceous	2628
		Gas	0.05	0.12	0.22	1.29	2.43	3.95	0.08		
Padme	P	Oil	0.55	8.2	21.41	0.03	0.41	1.08	0.02	Springar Fm/Cretaceous	2286
		Gas	0.02	0.3	0.79	0.42	5.95	16.19	0.08		
Bergnebb	P	Oil	1.52	6.6	13.96	0.07	0.33	0.69	0.02	Tang Fm/Paleocene	2160
		Gas	0.05	0.24	0.51	1.13	4.83	9.92	0.10		
Berggylt	P	Oil	1.03	5.37	11.97	0.05	0.27	0.62	0.02	Tang Fm/Paleocene	1998
		Gas	0.04	0.2	0.44	0.8	4.04	8.32	0.10		
Thanet 3	P	Oil	0.35	1.31	2.79	0.02	0.07	0.14	0.04	Tang Fm/Paleocene	1596
		Gas	0.01	0.05	0.1	0.28	0.98	1.99	0.16		
Thanet 4	P	Oil	1.9	5.59	10.65	0.09	0.28	0.53	0.04	Tang Fm/Paleocene	1936
		Gas	0.06	0.2	0.39	1.36	3.99	7.4	0.16		
Bolga	L									Lange Fm/Cretaceous	2860
		Gas	0.27	0.91	1.76	0.83	2.82	5.44	0.08		
White-headed Vult	L									Lange Fm/Cretaceous	3000
Lappet-faced Vultu	L									Lange Fm/Cretaceous	3500
Kylo Ren	L									Lange Fm/Cretaceous	3150
Sandvær	L									Lysing Fm/Cretaceous	2718
Slimål	L									Naust Fm/Pleistocene	427
Abbor	L									Naust Fm/Pleistocene	1544
Gjedde	L									Naust Fm/Pleistocene	1639
Stiff Upper Lip	L									Permian/Zechstein Gp	4081

**Table 4.1 Summary of volume and risk for prospects and leads from application for award.**

Discovery/ Prospect/Lead name	D/ P/ L	Case (Oil/ Gas)	Unrisked recoverable resources						Probability of discovery (0.00 - 1.00)	Reservoir	
			Oil [10 <sup>6</sup> Sm <sup>3</sup> ]			Gas [10 <sup>9</sup> Sm <sup>3</sup> ]				Litho-/ Chrono- stratigraphic level	Reservoir depth [m MLS]
			Low (P90)	Base (Mean)	High (P10)	Low (P90)	Base (Mean)	High (P10)			
Bobcat	P	Oil	0.49	8.67	23.90	0.01	0.20	0.57	0.05	Grey- and Red- beds/Triassic	2778
		Gas	0.08	1.38	3.76	0.38	6.81	18.60			
Bergnebb	P	Oil	1.52	6.60	13.96	0.07	0.33	0.69	0.02	Tang Fm/Paleocene	2160
		Gas	0.05	0.24	0.51	1.13	4.83	9.92			
Berggyllt	P	Oil	1.03	5.37	11.97	0.05	0.27	0.62	0.02	Tang Fm/Paleocene	1998
		Gas	0.04	0.20	0.44	0.80	4.04	8.32			
Thanet 3	P	Oil	0.35	1.31	2.79	0.02	0.07	0.14	0.04	Tang Fm/Paleocene	1596
		Gas	0.01	0.05	0.10	0.28	0.98	1.99			
Thanet 4	P	Oil	1.90	5.59	10.65	0.09	0.28	0.53	0.04	Tang Fm/Paleocene	1936
		Gas	0.06	0.20	0.39	1.36	3.99	7.40			
Leia	L	Oil	2.78	24.54	58.96	0.13	1.22	2.95	0.01	Springar Fm/Cretaceous	2408
		Gas	0.09	0.82	1.98	2.03	16.38	39.54			
Padme	L	Oil	0.55	8.20	21.41	0.03	0.41	1.08	0.02	Springar Fm/Cretaceous	2286
		Gas	0.02	0.30	0.79	0.42	5.95	16.19			
Andøya Central	L	Oil	2.20	7.59	15.30	0.30	1.08	2.15	0.04	Lange Fm/Cretaceous	2932
		Gas	0.25	0.90	1.84	1.75	6.38	12.80			
Andøya South	L	Oil	1.05	4.13	7.99	0.14	0.59	1.14	0.05	Lange Fm/Cretaceous	3226
		Gas	0.12	0.49	0.94	0.84	3.51	6.57			
Jyn	L	Oil	1.67	3.32	5.47	0.07	0.17	0.29	0.02	Springar Fm/Cretaceous	2628
		Gas	0.05	0.12	0.22	1.29	2.43	3.95			
Bolga	L	Oil							0.08	Lange Fm/Cretaceous	2860
		Gas	0.27	0.91	1.76	0.83	2.82	5.44			
White-headed Vult	L									Lange Fm/Cretaceous	3000
Lappet-faced Vultu	L									Lange Fm/Cretaceous	3500
Kylo Ren	L									Lange Fm/Cretaceous	3150
Sandvær	L									Lysing Fm/Cretaceous	2718
Slimål	L									Naust Fm/Pleistocene	427
Abbor	L									Naust Fm/Pleistocene	1544
Gjedde	L									Naust Fm/Pleistocene	1639
Stiff Upper Lip	L									Permian/Zechstein Gp	4081

**Table 4.2 Summary of volume and risk for prospects and leads at the time of lapse. Opportunities updated in the licence period are highlighted in red.**

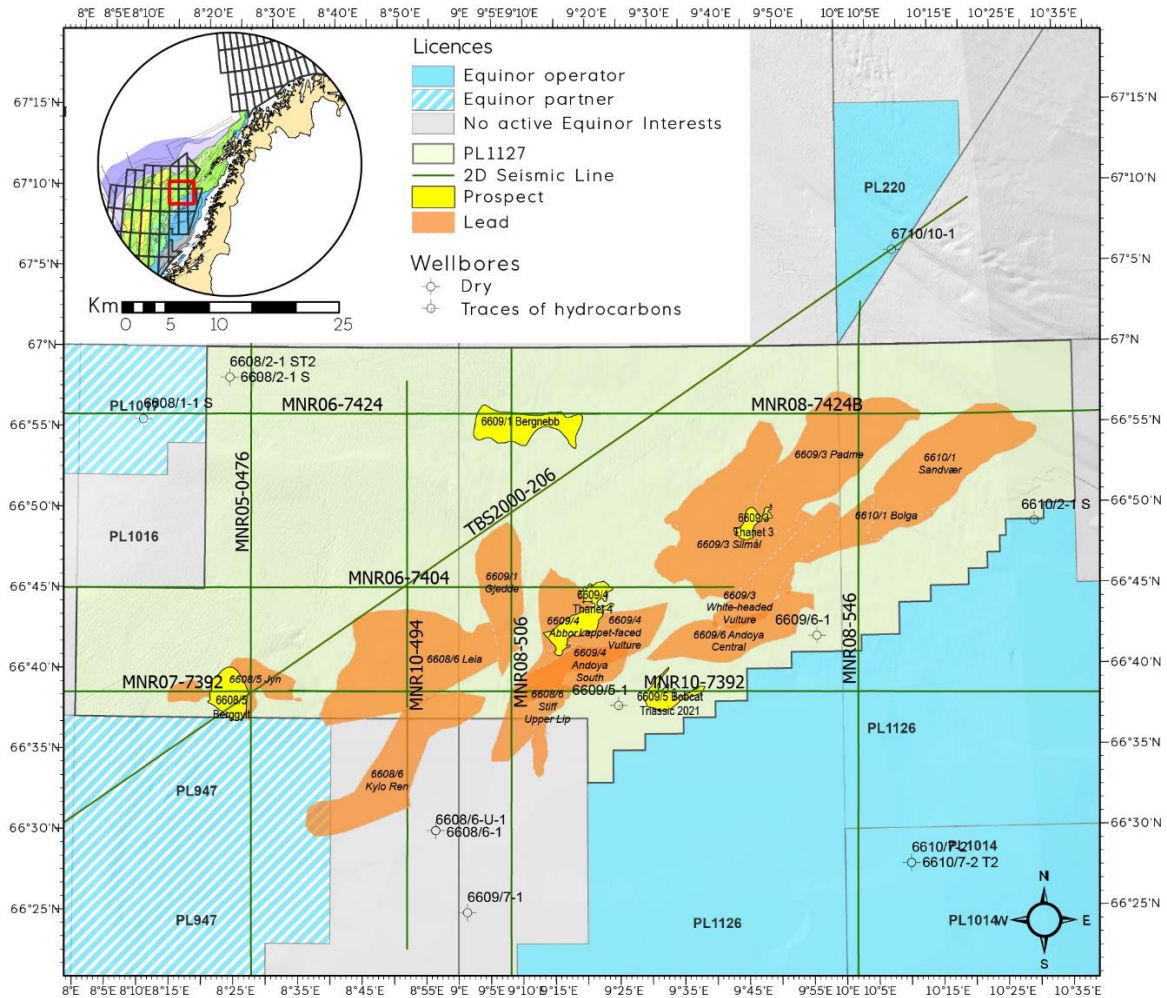


Figure 4.2 Summary map with prospect/leads at the time of lapse. Seismic common database indicated.

## 5 Technical assessment

The main purpose of the performed technical assessment was to evaluate the potential impact of new 3D seismic acquisition and the robustness of a future standalone development or subsea tie-back in the PL1127 area. The Leia lead was used as a representative opportunity for the prospectivity in the licence.

Based on regional understanding, seismic mapping and initial risking, reservoir is evaluated to be the main subsurface risk attributed to the prospect. Despite poor quality of available 2D data, presence of good reservoir sand is expected to be visible on the available data. Absence of seismic amplitudes indicative of sand within the prospect area therefore results in low probability for positive uplift on new 3D seismic. There is also a possibility that the trap definition can change significantly on good quality 3D data and ultimately disappear.

Conclusions from the technical assessment also gave insight to minimum economical volume for a future development, alternative development solutions, key uncertainties and sensitivity to probability of success. The selected case for Leia considered a development with pure pressure depletion with 6 gas producers for both the standalone and tie-back case to Aasta Hansteen (90km). In addition to the subsurface risks, the main uncertainties associated with the business cases are trap geometry, reservoir segmentation and drainage. Flow assurance is also uncertain for a 90 km tie-back.

---

## 6 Conclusions

The reservoir potential for identified opportunities in the Træna Basin has been downgraded after a framework review performed during the PL1127 licence period. The performed technical assessment also indicate challenging development conditions. The PL1127 partnership has therefore agreed to not pursue acquisition of new 3D seismic in the area and drop the licence.

7 APPENDIX

Table 5. Prospect Data

Block	6609/5	Prospect name	Bobcat	Discovery/Prospect/Lead		Prosp ID		NPD will in	NPD Approved (Y/N)	NPD will in
Play name	NPD will insert value	New Play (Y/N)	NPD will insert value	Outside play (Y/N)		NPD will insert value				
Oil, gas or O&G case	Gas	Reported by company	Equinor Energy AS	Reference document					Assessment year	2023
This is case nr		Structural element		Type of trap	Structural/Strat	Water depth	300		Seismic database (2D/3D)	
Resources in-place and recoverable Volumes, this case		Main phase				Associated phase				
		Low (P90)	Base, Mode	Base, Mean	High (P10)	Low (P90)	Base, Mode	Base, Mean	High (P10)	
In-place resources	Oil [10 <sup>6</sup> Sm <sup>3</sup> ] (>0.00)						0.05	0.05	1.03	2.83
	Gas [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)	0.65	0.55	11.32	31.03					
Recoverable resources	Oil 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)						0.01	0.01	0.21	0.57
	Gas 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)	0.39	0.32	6.81	18.59					
Reservoir Chrono (from)	Jurassic; Jurassic Middle	Reservoir Litho (from)		Source rock, chrono primary		Source rock, litho primary			Seal, chrono	
Reservoir Chrono (to)		Reservoir Litho (to)		Source rock, chrono secondary		Source rock, litho secondary			Seal, litho	
<b>Probability (fraction)</b>										
Total (oil + gas + oil&gas case) (0.00 - 1.00)	0.15	Oil case (0.00 - 1.00)	0.30	Gas case (0.00 - 1.00)	0.70	Oil and gas case (0.00 - 1.00)	0.00			
Reservoir (P1) (0.00 - 1.00)	0.65	Trap (P2) (0.00 - 1.00)	0.56	Charge (P3) (0.00 - 1.00)	0.40	Retention (P4) (0.00 - 1.00)	1.00			
<b>Parameters</b>	Low (P90)	Base	High (P10)	<b>Comments</b>						
Depth to top of prospect [m MSL] (>0.0)	2800.0	2800.0	2800.0	Retention (P4) is included in Trap (P2).						
Area of closure [km2] (>0.0)	3.1	21.9	46.1							
Reservoir thickness [m] (>0.0)	135.1	200.0	265.0							
HC column in prospect [m] (>0.0)	223.9	358.5	531.3							
Gross rock vol [10 <sup>9</sup> m <sup>3</sup> ] (>0.000)	0.1403	2.3596	6.5102							
Net to Gross [fraction] (0.00-1.00)	0.237	0.350	0.462							
Porosity [fraction] (0.00-1.00)	0.126	0.145	0.164							
Permeability [mD] (>0.0)										
Water saturation [fraction] (0.00-1.00)	0.549	0.600	0.651							
Bg [Rm <sup>3</sup> /Sm <sup>3</sup> ] (<1.0000)	0.0041	0.0042	0.0044							
1/Bo [Sm <sup>3</sup> /Rm <sup>3</sup> ] (<1.00)										
GOR, free gas [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)	8110.5	10975.0	18136.3							
GOR, oil [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)										
RF, oil main phase [fraction] (0.00-1.00)										
RF, gas ass phase [fraction] (0.00-1.00)										
RF, gas main phase [fraction] (0.00-1.00)	0.55	0.60	0.65							
RF, oil ass phase [fraction] (0.00-1.00)	0.17	0.20	0.23							
Temperature, top res [°C] (>0.0)				For NPD use:						
Pressure, top res [bar] (>0.0)				Innrapp. av geolog-init	NPD will insert	Registrert - init	NPD will in	Kart oppdatert	NPD will in	
Cut off criteria for N/G calculation	1	2	3	Dato:	NPD will insert	Registrert - Dato	NPD will in	Kart dato	NPD will in	
								Kart nr	NPD will in	

Table 7.1 Bobcat gas case

**Table 5. Prospect Data**

Block 6609/5		Prospect name Bobcat		Discovery/Prospect/Lead		Prosp ID		NPD will in		NPD Approved (Y/N)		NPD will in	
Play name NPD will insert value		New Play (Y/N)		Outside play (Y/N)		NPD will insert value							
Oil, gas or O&G case		Reported by company		Reference document				Assessment year		2023			
This is case nr		Structural element		Type of trap		Structural/Strat		Water depth		300		Seismic database (2D/3D)	
Resources in-place and recoverable Volumes, this case		Main phase		Base, Mode		Base, Mean		Associated phase		Base, Mod		Base, Mean	
		Low (P90)				High (P10)		Low (P90)				High (P10)	
In-place resources	Oil [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)	2.43	1.91	41.44	116.13								
	Gas [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)							0.13	0.10			2.29	6.26
Recoverable resources	Oil 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)	0.49	0.37	8.67	23.88								
	Gas 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)							0.08	0.08			1.38	3.76
Reservoir Chrono (from)	Jurassic/Jurassic Middle	Reservoir Litho (from)		Source rock, chrono primary		Source rock, litho primary						Seal, chrono	
Reservoir Chrono (to)		Reservoir Litho (to)		Source rock, chrono secondary		Source rock, litho secondary						Seal, litho	
<b>Probability (fraction)</b>													
Total (oil + gas + oil&gas case) (0.00 - 1.00)	0.15	Oil case (0.00 - 1.00)	0.30	Gas case (0.00 - 1.00)	0.70	Oil and gas case (0.00 - 1.00)	0.00						
Reservoir (P1) (0.00 - 1.00)	0.65	Trap (P2) (0.00 - 1.00)	0.56	Charge (P3) (0.00 - 1.00)	0.40	Retention (P4) (0.00 - 1.00)	1.00						
<b>Parameters</b>													
	Low (P90)	Base	High (P10)	<i>Comments</i>									
Depth to top of prospect [m MSL] (>0.0)	2800.0	2800.0	2800.0	Retention (P4) is included in Trap (P2).									
Area of closure [km2] (>0.0)	3.1	21.9	46.1										
Reservoir thickness [m] (>0.0)	135.1	200.0	265.0										
HC column in prospect [m] (>0.0)	223.9	358.5	531.3										
Gross rock vol [10 <sup>9</sup> m <sup>3</sup> ] (>0.000)	0.1403	2.3596	6.5102										
Net to Gross [fraction] (0.00-1.00)	0.237	0.350	0.462										
Porosity [fraction] (0.00-1.00)	0.126	0.145	0.164										
Permeability [mD] (>0.0)													
Water saturation [fraction] (0.00-1.00)	0.549	0.600	0.651										
Bg [Rm <sup>3</sup> /Sm <sup>3</sup> ] (<1.0000)													
1/Bo [Sm <sup>3</sup> /Rm <sup>3</sup> ] (<1.00)	0.757	0.835	0.913										
GOR, free gas [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)													
GOR, oil [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)	41.9	55.9	70.4										
RF, oil main phase [fraction] (0.00-1.00)	0.17	0.21	0.25										
RF, gas ass phase [fraction] (0.00-1.00)	0.55	0.60	0.65										
RF, gas main phase [fraction] (0.00-1.00)													
RF, oil ass phase [fraction] (0.00-1.00)													
Temperature, top res [°C] (>0.0)				For NPD use:									
Pressure, top res [bar] (>0.0)				Innrapp. av geolog-init	NPD will insert	Registrert - init	NPD will in	Kart oppdatert	NPD will in			NPD will in	
Cut off criteria for N/G calculation	1	2	3	Dato:	NPD will insert	Registrert - Dato	NPD will in	Kart dato	NPD will in			NPD will in	
								Kart nr				NPD will in	

**Table 7.2 Bobcat oil case**

**Table 5. Prospect Data**

Block	6609/4	Prospect name	Andøya South	Discovery/Prospect/Lead		Prospect ID	NPD will in	NPD Approved (Y/N)	NPD will in	
Play name	NPD will insert value	New Play (Y/N)	NPD will insert value	Outside play (Y/N)	NPD will insert value					
Oil, gas or O&G case	Gas	Reported by company	Equinor Energy AS	Reference document				Assessment year	2023	
This is case nr		Structural element		Type of trap	Stratigraphic	(Water depth	300	Seismic database (2D/3D)		
Resources in-place and recoverable Volumes, this case		Main phase		Base, Mean	High (P10)	Low (P90)	Base, Mod	Base, Mean	High (P10)	
In-place resources	Oil [10 <sup>6</sup> Sm <sup>3</sup> ] (>0.00)						0.25	0.60	1.00	1.88
	Gas [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)	1.43	3.52	5.88	11.03					
Recoverable resources	Oil 10 <sup>6</sup> [Sm <sup>3</sup> ] (>0.00)						0.14	0.36	0.60	1.14
	Gas 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)	0.84	2.10	3.51	6.57					
Reservoir Chrono (from)	Cretaceous,Cretaceous Early	Reservoir Litho (from)		Source rock, chrono primary		Source rock, litho primary		Seal, chrono		
Reservoir Chrono (to)		Reservoir Litho (to)		Source rock, chrono secondary		Source rock, litho secondary		Seal, litho		
<b>Probability (fraction)</b>										
Total (oil + gas + oil&gas case) (0.00 - 1.00)	0.10	Oil case (0.00 - 1.00)	0.50	Gas case (0.00 - 1.00)	0.50	Oil and gas case (0.00 - 1.00)	0.00			
Reservoir (P1) (0.00 - 1.00)	0.30	Trap (P2) (0.00 - 1.00)	0.40	Charge (P3) (0.00 - 1.00)	0.80	Retention (P4) (0.00 - 1.00)	1.00			
<b>Parameters</b>										
	Low (P90)	Base	High (P10)	Comments						
Depth to top of prospect [m MSL] (>0.0)	3236.0	3236.0	3236.0	Retention (P4) is included in Trap (P2).						
Area of closure [km2] (>0.0)	4.3	9.9	16.7							
Reservoir thickness [m] (>0.0)	35.1	92.9	168.6							
HC column in prospect [m] (>0.0)	238.4	366.5	503.8							
Gross rock vol [10 <sup>9</sup> m <sup>3</sup> ] (>0.000)	0.2091	0.7049	1.2345							
Net to Gross [fraction] (0.00-1.00)	0.146	0.219	0.300							
Porosity [fraction] (0.00-1.00)	0.148	0.188	0.230							
Permeability [mD] (>0.0)										
Water saturation [fraction] (0.00-1.00)	0.249	0.300	0.351							
Bg [Rm <sup>3</sup> /Sm <sup>3</sup> ] (<1.0000)	0.0032	0.0035	0.0038							
1/Bo [Sm <sup>3</sup> /Rm <sup>3</sup> ] (<1.00)										
GOR, free gas [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)	5547.4	5882.4	6260.3							
GOR, oil [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)										
RF, oil main phase [fraction] (0.00-1.00)										
RF, gas ass phase [fraction] (0.00-1.00)										
RF, gas main phase [fraction] (0.00-1.00)	0.50	0.60	0.70							
RF, oil ass phase [fraction] (0.00-1.00)	0.50	0.60	0.70							
Temperature, top res [°C] (>0.0)				For NPD use:						
Pressure, top res [bar] (>0.0)				Innrapp. av geolog-init	NPD will insert	Registrert - init	NPD will in	Kart oppdatert	NPD will in	
Cut off criteria for N/G calculation	1	2	3	Dato:	NPD will insert	Registrert - Dato	NPD will in	Kart dato	NPD will in	
								Kart nr	NPD will in	

**Table 7.3 Andøya South gas case**

Table 5. Prospect Data										
Block	6609/4		Prospect name	Andøya South		Discovery/Prospect/Lead			Prospect ID	
Play name	NPD will insert value		New Play (Y/N)	NPD will insert value		Outside play (Y/N)	NPD will insert value		NPD will in	NPD Approved (Y/N)
Oil, gas or O&G case	Oil		Reported by company	Equinor Energy AS		Reference document			Assessment year	2023
This is case nr			Structural element			Type of trap	Stratigraphic (Water depth)		300	Seismic database (2D/3D)
Resources in-place and recoverable Volumes, this case			Main phase			Base, Mode	Base, Mean		High (P10)	Low (P90)
In-place resources	Oil [10 <sup>6</sup> Sm <sup>3</sup> ] (>0.00)		3.54	8.46		13.80	26.20			
Recoverable resources	Gas [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)							0.42	1.02	1.65 3.13
	Oil 10 <sup>6</sup> [Sm <sup>3</sup> ] (>0.00)		1.05	2.54		4.13	7.99			
	Gas 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)							0.12	0.30	0.49 0.95
Reservoir Chrono (from)	Cretaceous;Cretaceous Early		Reservoir Litho (from)			Source rock, chrono primary	Source rock, litho primary		Seal, chrono	
Reservoir Chrono (to)			Reservoir Litho (to)			Source rock, chrono secondary	Source rock, litho secondary		Seal, litho	
<b>Probability (fraction)</b>										
Total (oil + gas + oil&gas case) (0.00 - 1.00)	0.10		Oil case (0.00 - 1.00)	0.50		Gas case (0.00 - 1.00)	0.50		Oil and gas case (0.00 - 1.00)	0.00
Reservoir (P1) (0.00 - 1.00)	0.30		Trap (P2) (0.00 - 1.00)	0.40		Charge (P3) (0.00 - 1.00)	0.80		Retention (P4) (0.00 - 1.00)	1.00
<b>Parameters</b>										
	Low (P90)	Base	High (P10)		Comments					
Depth to top of prospect [m MSL] (>0.0)	3236.0		3236.0	3236.0	Retention (P4) is included in Trap (P2).					
Area of closure [km2] (>0.0)	4.3		9.9	16.7						
Reservoir thickness [m] (>0.0)	35.1		92.9	168.6						
HC column in prospect [m] (>0.0)	238.4		366.5	503.8						
Gross rock vol [10 <sup>9</sup> m <sup>3</sup> ] (>0.000)	0.2091		0.7049	1.2345						
Net to Gross [fraction] (0.00-1.00)	0.146		0.219	0.300						
Porosity [fraction] (0.00-1.00)	0.148		0.188	0.230						
Permeability [mD] (>0.0)										
Water saturation [fraction] (0.00-1.00)	0.300		0.381	0.454						
Bg [Rm <sup>3</sup> /Sm <sup>3</sup> ] (<1.0000)										
1/Bo [Sm <sup>3</sup> /Rm <sup>3</sup> ] (<1.00)	0.740		0.769	0.801						
GOR, free gas [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)										
GOR, oil [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)	104.6		120.0	135.4						
RF, oil main phase [fraction] (0.00-1.00)	0.25		0.30	0.35						
RF, gas ass phase [fraction] (0.00-1.00)	0.25		0.30	0.35						
RF, gas main phase [fraction] (0.00-1.00)										
RF, oil ass phase [fraction] (0.00-1.00)										
Temperature, top res [°C] (>0.0)					For NPD use:					
Pressure, top res [bar] (>0.0)					Innrapp. av geolog-init	NPD will insert	Registrert - init	NPD will in	Kart oppdatert	NPD will in
Cut off criteria for N/G calculation	1	2	3		Dato:	NPD will insert	Registrert - Dato	NPD will in	Kart dato	NPD will in
									Kart nr	NPD will in

Table 7.4 Andøya South oil case



**Table 5. Prospect Data**

Block	6609/6	Prospect name	Andøya Central	Discovery/Prospect/Lead		Prosp ID	NPD will in	NPD Approved (Y/N)	NPD will in	
Play name	NPD will insert value	New Play (Y/N)	NPD will insert value	Outside play (Y/N)	NPD will insert value					
Oil, gas or O&G case	Gas	Reported by company	Equinor Energy AS	Reference document				Assessment year	2023	
This is case nr		Structural element		Type of trap	Stratigraphic	(Water depth	300	Seismic database (2D/3D)		
Resources in-place and recoverable Volumes, this case		Main phase		Base, Mean	High (P10)	Associated phase	Low (P90)	Base, Mean	High (P10)	
In-place resources	Oil [10 <sup>6</sup> Sm <sup>3</sup> ] (>0.00)						0.51	1.30	1.81	3.62
Recoverable resources	Gas [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)	3.01	7.60	10.66	21.35					
Reservoir Chrono (from)	Cretaceous,Cretaceous Early	Reservoir Litho (from)		Source rock, chrono primary		Source rock, litho primary		Seal, chrono		
Reservoir Chrono (to)		Reservoir Litho (to)		Source rock, chrono secondary		Source rock, litho secondary		Seal, litho		
<b>Probability (fraction)</b>										
Total (oil + gas + oil&gas case) (0.00 - 1.00)	0.08	Oil case (0.00 - 1.00)	0.50	Gas case (0.00 - 1.00)	0.50	Oil and gas case (0.00 - 1.00)	0.00			
Reservoir (P1) (0.00 - 1.00)	0.30	Trap (P2) (0.00 - 1.00)	0.32	Charge (P3) (0.00 - 1.00)	0.80	Retention (P4) (0.00 - 1.00)	1.00			
<b>Parameters</b>										
Depth to top of prospect [m MSL] (>0.0)	2942.0	Base	2942.0	High (P10)	2942.0	Comments				
Area of closure [km2] (>0.0)	4.3		9.9		16.7	Retention (P4) is included in Trap (P2).				
Reservoir thickness [m] (>0.0)	35.1		92.9		168.6					
HC column in prospect [m] (>0.0)	181.3		291.4		433.7					
Gross rock vol [10 <sup>9</sup> m <sup>3</sup> ] (>0.000)	0.4250		1.2896		2.5555					
Net to Gross [fraction] (0.00-1.00)	0.146		0.219		0.300					
Porosity [fraction] (0.00-1.00)	0.148		0.188		0.230					
Permeability [mD] (>0.0)										
Water saturation [fraction] (0.00-1.00)	0.249		0.300		0.351					
Bg [Rm <sup>3</sup> /Sm <sup>3</sup> ] (<1.0000)	0.0032		0.0035		0.0038					
1/Bo [Sm <sup>3</sup> /Rm <sup>3</sup> ] (<1.00)										
GOR, free gas [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)	5547.4		5882.4		6260.3					
GOR, oil [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)										
RF, oil main phase [fraction] (0.00-1.00)										
RF, gas ass phase [fraction] (0.00-1.00)										
RF, gas main phase [fraction] (0.00-1.00)	0.50		0.60		0.70					
RF, oil ass phase [fraction] (0.00-1.00)	0.50		0.60		0.70					
Temperature, top res [°C] (>0.0)						For NPD use:				
Pressure, top res [bar] (>0.0)						Innrapp. av geolog-init	NPD will in	Registrert - init	NPD will in	
Cut off criteria for N/G calculation	1	2	3			Dato:	NPD will in	Registrert - Dato	NPD will in	
							NPD will in	Kart oppdatert	NPD will in	
							NPD will in	Kart dato	NPD will in	
								Kart nr	NPD will in	

**Table 7.5 Andøya Central gas case**

**Table 5. Prospect Data**

Block	6609/6	Prospect name	Andøya Central	Discovery/Prospect/Lead		Prospect ID	NPD will in	NPD Approved (Y/N)	NPD will in
Play name	NPD will insert value	New Play (Y/N)	NPD will insert value	Outside play (Y/N)	NPD will insert value				
Oil, gas or O&G case	Oil	Reported by company	Equinor Energy AS	Reference document				Assessment year	2023
This is case nr		Structural element		Type of trap	Stratigraphic	Water depth	300	Seismic database (2D/3D)	
Resources in-place and recoverable Volumes, this case		Main phase		Base, Mean	High (P10)	Associated phase		Base, Mean	High (P10)
		Low (P90)	Base, Mode	Base, Mean	High (P10)	Low (P90)	Base, Mode	Base, Mean	High (P10)
In-place resources	Oil [10 <sup>6</sup> Sm <sup>3</sup> ] (>0.00)	7.34	18.35	25.36	50.65				
	Gas [10 <sup>9</sup> Sm <sup>3</sup> ] (>0.00)					0.88	2.20	3.03	6.07
Recoverable resources	Oil 10 <sup>6</sup> [Sm <sup>3</sup> ] (>0.00)	2.20	5.46	7.59	15.32				
	Gas 10 <sup>9</sup> [Sm <sup>3</sup> ] (>0.00)					0.26	0.65	0.91	1.84
Reservoir Chrono (from)	Cretaceous,Cretaceous Early	Reservoir Litho (from)		Source rock, chrono primary		Source rock, litho primary		Seal, chrono	
Reservoir Chrono (to)		Reservoir Litho (to)		Source rock, chrono secondary		Source rock, litho secondary		Seal, litho	
<b>Probability (fraction)</b>									
Total (oil + gas + oil&gas case) (0.00 - 1.00)	0.08	Oil case (0.00 - 1.00)	0.50	Gas case (0.00 - 1.00)	0.50	Oil and gas case (0.00 - 1.00)	0.00		
Reservoir (P1) (0.00 - 1.00)	0.30	Trap (P2) (0.00 - 1.00)	0.32	Charge (P3) (0.00 - 1.00)	0.80	Retention (P4) (0.00 - 1.00)	1.00		
<b>Parameters</b>									
	Low (P90)	Base	High (P10)	Comments					
Depth to top of prospect [m MSL] (>0.0)	2942.0	2942.0	2942.0	Retention (P4) is included in Trap (P2).					
Area of closure [km2] (>0.0)	4.3	9.9	16.7						
Reservoir thickness [m] (>0.0)	35.1	92.9	168.6						
HC column in prospect [m] (>0.0)	181.3	291.4	433.7						
Gross rock vol [10 <sup>9</sup> m <sup>3</sup> ] (>0.000)	0.4250	1.2896	2.5555						
Net to Gross [fraction] (0.00-1.00)	0.146	0.219	0.300						
Porosity [fraction] (0.00-1.00)	0.148	0.188	0.230						
Permeability [mD] (>0.0)									
Water saturation [fraction] (0.00-1.00)	0.300	0.381	0.454						
Bg [Rm <sup>3</sup> /Sm <sup>3</sup> ] (<1.0000)									
1/Bo [Sm <sup>3</sup> /Rm <sup>3</sup> ] (<1.00)	0.740	0.769	0.801						
GOR, free gas [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)									
GOR, oil [Sm <sup>3</sup> /Sm <sup>3</sup> ] (>0.0)	104.6	120.0	135.4						
RF, oil main phase [fraction] (0.00-1.00)	0.25	0.30	0.35						
RF, gas ass phase [fraction] (0.00-1.00)	0.25	0.30	0.35						
RF, gas main phase [fraction] (0.00-1.00)									
RF, oil ass phase [fraction] (0.00-1.00)									
Temperature, top res [°C] (>0.0)				For NPD use:					
Pressure, top res [bar] (>0.0)				Innrapp. av geolog-init	NPD will insert	Registrert - init	NPD will in	Kart oppdatert	NPD will in
Cut off criteria for N/G calculation	1	2	3	Dato:	NPD will insert	Registrert - Dato	NPD will in	Kart dato	NPD will in
								Kart nr	NPD will in

**Table 7.6 Andøya Central oil case**