PL 1191 – Licence Status Report

Summary

PL1191 was applied for in APA 2022 and awarded in January 2023, with Equinor as Operator (40%) and with Aker BP (30%) and Wintershall Dea (30%) as partners. The licence included acreage within blocks 6507/10 and 6507/11, located 15-20 km south of the Heidrun Field. (Figure 1-1). The prime opportunity, Novus South is a structural-stratigraphic combination trap prospect with Garn Fm. sandstones as target level. The trap apex is at 2776 m MSL burial depth. Well 6507/10-2S (Novus discovery) was drilled within the awarded PL1191 acreage in a previous licence context (PL645, 2014), discovering a small non-commercial oil and gas accumulation in Garn Fm. sandstone reservoir. This discovery shows a 'direct seismic hydrocarbon indication' (DHI) in the form of a depth conformable fluid cube amplitude shut-off in a small Middle Jurassic fault block along the western footwall of the Grinda Graben. The Novus South prospect is situated downflank from the Novus Discovery and is PL1191 licence's prime value driving opportunity; however, it does not show any confident seismic DHIs. Geologically this prospect is dependent on a working structural/stratigraphic combination trap within the Garn Fm. Reservoir to separate and seal Novus South laterally from the upflank Novus Discovery. As a yet unproven trapping concept within the Fangst Gp. play, Novus South carries a relatively high risk on trap seal integrity. Stratigraphic termination of Garn Fm. sandstones (reservoir pinch-out/and or truncation to the north and north-west) is a prerequisite for significant accumulation of commercially interesting HC-column, volume and value.

A variety of seismic datasets, including a new good quality semi-regional multi-azimuth (MAZ) seismic data, acquired as per the licence work commitment, has been analysed and interpreted. However, this dedicated G&G effort did not provide significant uplift to the prospect volume distribution, nor significant de-risking of the Novus South prospect to provide a valuable economic case and warrant a positive drill decision within the licence. In summary the licence has failed to identify any opportunities to mature further following a drill decision, due to low volume potential and/ or low probability of success. A drop decision for PL1191 has been agreed in the licence as no commercially viable drilling candidate can be identified in the licence at this time.

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1 Licence history

Licence: PL1191

Awarded: 10.01.2023

Licence period: Expires 17.02.2025 (DoD decision) Initial period: 2 years

Licence group:

Equinor Energy AS	40% (Operator)
Aker BP ASA	30%
Wintershall Dea Norge AS	30%

Licence area: 154,563 km^2

Work programme: Acquire 3D-seismic (PGS22M02NWS) and perform G&G studies by 17.02.2025
Decision to drill an exploration well or drop by 17.02.2025

1.1 Licence Meetings Held

Table 1-1: Licence meetings held

Date	License Meeting
18.04.2023	PL1191 EC-MC Meeting #1
29.09.2023	PL 1191 EC Work Meeting
23.11.2023	PL1191 EC-MC Meeting #2
22.11.2024	PL1191 EC-MC Meeting #3

Table 1-2: Work Performed

Date	Work Task
01.03.2023 – 28.02.2024	Seismic acquisition and processing of 3D-seismic (PGS22M02NWS)
15.11.2023	Initial G&G studies incl seismic & well analysis and interpretation. Prospect evaluation #1
15.11.2024	Final G&G studies incl seismic & well analysis and interpretation. Including refinement study of Jurassic chrono- and bio-stratigraphic data records for higher resolution analysis and interpretation. Prospect evaluation #2.

1.2 Reason for Surrender

The prospectivity has been evaluated on good quality reprocessed and good recently acquired/processed seismic data and advanced analysis of relevant wells. Due to moderate volume potential and a high stratigraphic trap risk (thus low probability of success), prospect maturation has failed to identify any viable opportunities to mature further following a drill decision. A drop decision for PL1191 has been agreed in the licence, as no commercially viable drilling candidate can be identified in the license at this time.

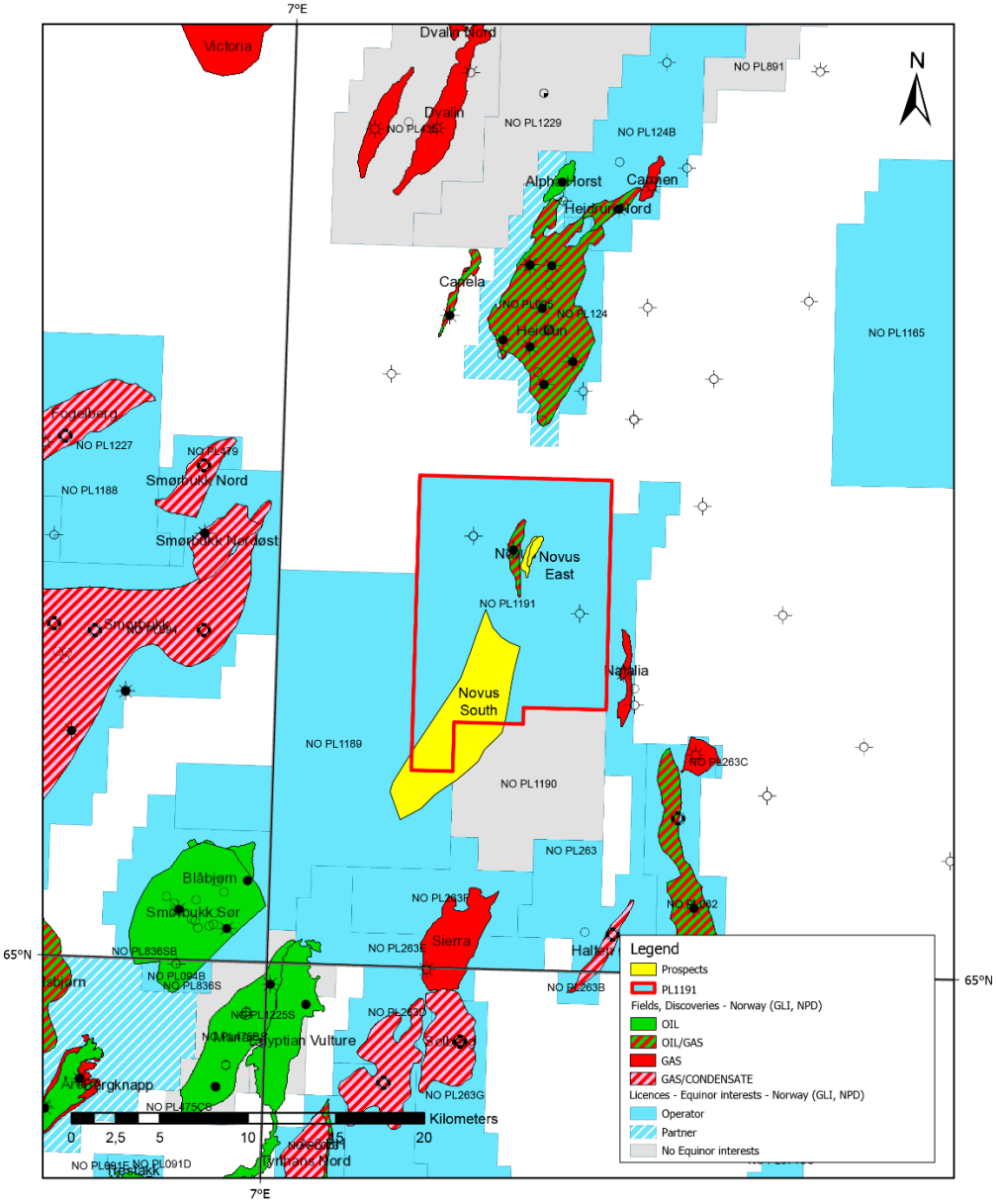

Figure 1-1: Location map for PL1191 with prospects, fields and wells.

2 Database overviews

2.1 Seismic Data

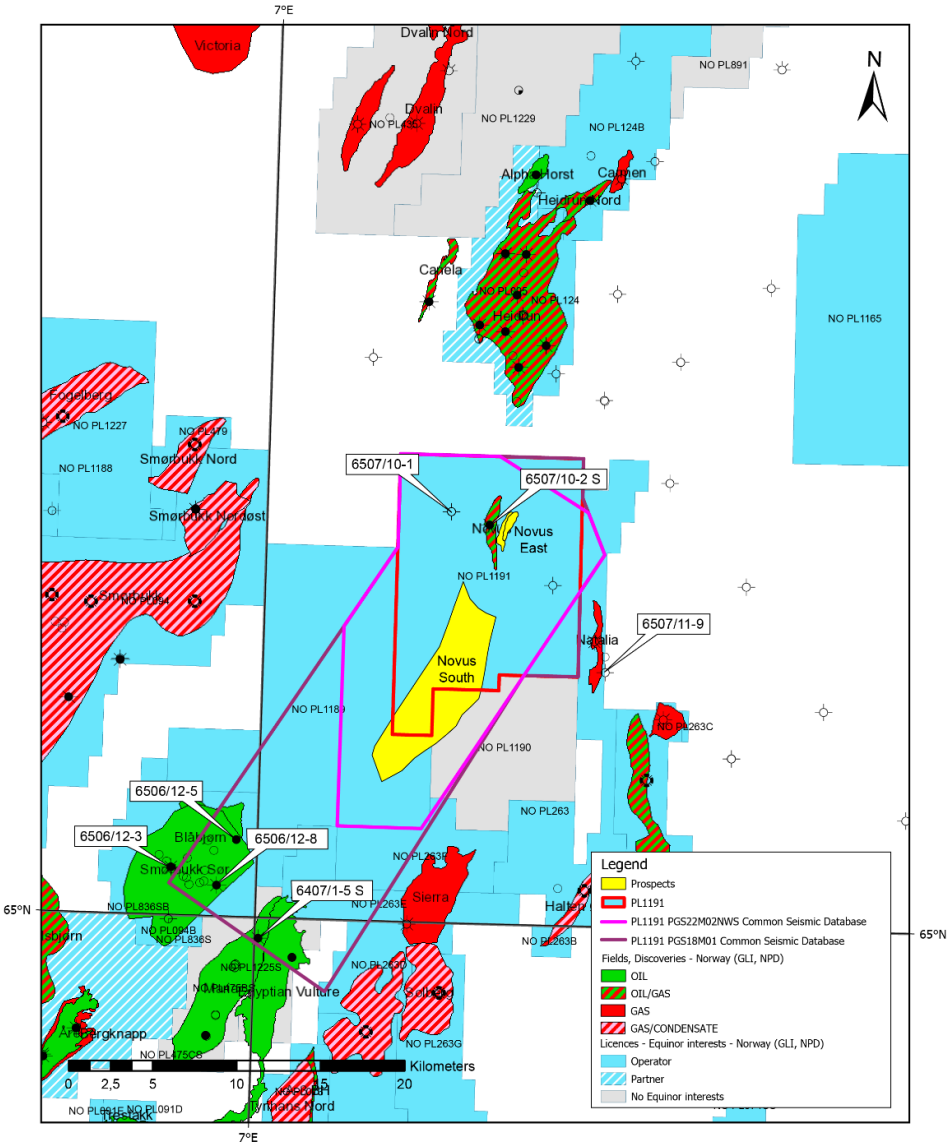

Figure 2-1: PL1191 common seismic database and key wells used in the assessment of Novus South.

Table 2-1: 3D Common Seismic database

Survey	Year	Acquisition	Processing	Migration	Domain	Stacks	Area (km^2)	Quality
PGS18M01-PGS16909NWS	2018	PGS (HVG2011, HVG2013) GeoStreamer broadband	PGS	KPSDM	Time / Depth	Raw full, final full and angle stacks	370	Good
PGS22M02NWS MAZ	2022	PGS Geostreamer	PGS (MAZ including merge of PGS22002 HVG2011, HVG2013)	TTI KPSDM	Time / Depth	Raw full, final full and angle stacks	222	Good

2.2 Well Data

The key wells used in the assessment of Nous South are listed in Table 2.2.

Table 2-2: Key well database

Well	NPDID	Year	Drilling operator	Discovery/Field/Well name	Status	Fm. at TD	Well use
6407/1-5 S	6774	2012	Wintershall Norge AS	Maria appraisal	Oil/Gas	Tilje Fm.	T,P,D
6506/12-3	468	1985	Den norske stats oljeselskap a.s	Smørbukk Sør discovery/ Åsgard	Oil/Gas	Tilje Fm.	R,T,SRM, F,P,R
6506/12-5	852	1986	Den norske stats oljeselskap a.s	Smørbukk Sør appraisal/ Åsgard	Oil	Åre Fm.	D,T,SRM, F, P,R
6506/12-8	1068	1988	Den norske stats oljeselskap a.s	Smørbukk Sør appraisal/ Åsgard	Oil/Gas	Tilje Fm.	D,T,SRM, F,P,R
6507/10-1	81	1982	BP Norway Limited U.A.		Dry	Åre Fm.	T,SRM,R
6507/10-2 S	7300	2014	Faroe Petroleum Norge AS	Novus discovery	Oil/Gas	Åre Fm.	D,T,DC, SRM,F,P, R,GM
6507/11-9	5766	2008	StatoilHydro Petroleum AS	Natalia discovery	Gas	Båt Gp.	D,T,SMR, P

Key to well usage: D = biostratigraphy and depositional model, T = seismic well tie, DC = depth conversion, SRM = source rock and migration, F = fluid parameters, P = pressure study parameters, R = reservoir parameter

3 Results of geological and geophysical studies

The following G&G studies were carried out in the licence evaluation:

3.1 Seismic Processing / Reprocessing

The licence commitment in part was to acquire 3D-seismic within 17.02.2025. This commitment was met with the acquisition into the common licence database of the new PGS22M02NWS MAZ dataset (Table 2-1). The seismic processing was performed, utilizing novel technologies by PGS. The multi-azimuth processing utilised the legacy MC3D-HVG2013 and newly acquired PGS22002 3D seismic surveys with perpendicular acquisition orientations covering the Haltenbanken area in the Norwegian Sea. The migration technique used was Kirchhoff pre-stack depth migration (KPSDM). The objective of the multi-azimuth PGS22M02NWS project was to deliver upgraded geophysical images of the subsurface enabling improved structural and stratigraphic interpretation and quantitative reservoir characterization. An improved signal-to-noise level and illumination aimed to benefit the imaging of subtle Jurassic targets, as well as improve fault imaging, using targeted demultiple and denoise, and a more elaborate velocity building procedure, using DAZ processing. The processing of the data was performed in PGS' Imaging Centre in Oslo, Norway, between March 2023 and February 2024.

3.2 Seismic Interpretation and Mapping

Seismic interpretation of key horizons was re-evaluated using the legacy reprocessed data set PGS18M01-PGS16909NWS and the new PGS22M02NWS MAZ dataset. Locally, faults were verified or remapped. This resulted in a new set of time and depth structure maps. The maps were used to create amplitude extractions to look for features to aid the interpretation of reservoir and/or hydrocarbon presence. The updated structure maps did not significantly impact the prospects and leads outlines or gross rock volumes. No new W-E trending faults of significance were identified, potentially reinforcing the Novus South northern and north-western stratigraphic trap elements. None of the utilized seismic datasets did provide convincing seismic evidence for consistent sandstone pinch-out and/or upper Jurassic truncation along the critical trap elements.

3.3 Geophysical Observations and AVO Assessment

A geophysical evaluation of the Novus South prospect following Equinor's best practice workflow including amplitude versus offset (AVO) analysis was performed using seismic datasets described in Table 2-1. AVO assessment supports presence of Garn Fm. sandstone within the prospect area, which can be well-tied from the Novus discovery to the Maria field. The sandstone displays a class II and IIP AVO response. 1D and 2D fluid replacement and lithology modelling suggests that we should see a separation between hydrocarbon filled and brine sandstone on seismic. However, there are no observations of a clear DHI expressed as a depth conform amplitude shut off. The observed strong AVO anomaly is interpreted to mainly be an effect of a change in lithology/porosity and seismic tuning effects. Low saturation hydrocarbon filling of the sandstones along the believed migration path between the Maria and Heidrun fields, where Novus South is located, may also cause anomalous amplitude response. In conclusion, the seismic AVO / DHI analysis and interpretation did not consistently supporting a commercial sized hydrocarbon accumulation within the prospect outline.

4 Prospect update report

4.1 Novus South

The prime opportunity within PL1191 is the Novus South prospect, a middle Jurassic (Aalenian-Bajocian Garn Fm.) structural-stratigraphic sandstone combination trap, located ~15 km south of the Heidrun Field. The prospect is located along the eastern margin of the prominent Smørbukk-Heidrun structural segment. The prospect is low risk with respect to reservoir presence and quality distribution, and hydrocarbon charge (HC-charge). The high confidence Garn Fm. sandstone reservoir presence prediction is backed up by advanced seismic interpretation and precise borehole log- and core-calibration. The prospect is in a highly favorable charge position, along the HC-migration route from Maria and Smørbukk Sør Fields (both with Garn reservoirs filled to spill) towards Novus Discovery (Garn reservoir filled to spill) and further north to the Heidrun Field. However, trap risk is considered high, given lack of continuous W-E and SSW-NNE trending faults framing the prospect structurally. Thus, the Novus South trap requires a reservoir/trap/seal model which stratigraphically disconnects the Novus South opportunity from the up-dip discovery (Well 6507/10-2S) and disconnect the prospect from the dry legacy Well 6507/10-1 to the NNW. Conceptually, stratigraphic termination via sandstone pinch-out and/or by subtle Upper Jurassic reservoir truncation of Garn Fm. to the North and NW, setting up a combined structural/stratigraphic trap, is a plausible trap model. From regional interpretation and assessment of seismic and well data, the Operator finds evidence for the existence of two separate Garn Fm. reservoir sandstone systems, spatially and temporally offset to each other. However, the existence of a diachronous and discontinuous set of Garn Fm. sandstones with sufficient pinch-out and disconnection as to set up a stratigraphic trapping configuration is not yet proven. Moreover, the thin nature of such a pinch-out is challenging to image on seismic data. Hence a working combination trap of this nature is inherently high risk. Accordingly, the plausibility of a working trap has formed primary focus and been thoroughly evaluated by the Licence. Quantitative geophysical techniques (seismic stratigraphy, seismic lithology and fluid prediction / AVO and DHI analyses) combined with refined geological studies (predictive bio-/chrono-/sequence-stratigraphic analyses) have, however, not led to significant risk reduction for the Novus South prospect.

The expected hydrocarbon phase in Novus South is oil & gas. The in-place and recoverable volumes are shown in Table 4-1 and Table 4-2 respectively. The recovery factors are set with reference to analogues in nearby producing fields and provisional assumptions for potential development solutions.

Table 4-1 In-place resources in the Novus South prospect and associated risk summary.

Resource Phase	P100	P90	Mean	P10	P0
Main: Oil (10^6 Sm^3)	0.73	2.28	17.6	43.3	83.9
Associated: Gas (10^9 Sm^3)	0.16	0.51	3.87	9.47	18.7
Main: Gas (10^9 Sm^3)	0.01	0.10	3.79	9.74	23.7
Associated: Condensate (10^6 Sm^3)	<0.01	0.03	1.03	2.64	6.48
Total Resources (10^6 Sm^3 OE)	0.92	2.96	26.3	65.4	128.7

Case	P(case)
Oil	0.000
Gas	0.000
Oil & Gas	0.147
Success Discovery	0.147

Table 4-2 Recoverable resources in the Novus South prospect.

Resource Phase	P100	P90	Mean	P10	P0
Main: Oil (10^6 Sm^3)	0.27	0.81	6.63	16.2	33.8
Associated: Gas (10^9 Sm^3)	0.06	0.18	1.46	3.57	7.45
Gas (10^9 Sm^3)	<0.01	0.03	1.14	2.91	7.67
Condensate (10^6 Sm^3)	<0.01	0.01	0.31	0.79	2.07
Total Resources (10^6 Sm^3 OE)	0.33	1.07	9.53	23.4	50.2

4.2 Novus East

The Novus East prospect was identified and documented as a secondary opportunity in the licence application phase, however, given the low volume and value potential, the prospect has not been further matured. The prospect is a small downfaulted hanging-wall structural trap immediately east of the Novus Discovery with a relatively low geological risk. Comparable to the Novus Discovery, Novus East is supported by a seismic DHI from a fluid-cube depth conformant amplitude shut-off (Figure 4-2). Seismic analyses and interpretation suggest hydrocarbon charge in undifferentiated Fangst Gp. sandstones (possibly amalgamated Garn Fm. and Ile Fm. sandstones in absence of the preservation of the intercalated Not Fm. mudstones). The seismic analyses also suggest an additional hydrocarbon charge in the underlying Tilje Fm. sandstones representing a stacked Jurassic pay opportunity. The expected hydrocarbon phase in Novus East is oil & gas similar to the Novus Discovery (Well 6507/10-2S). The in-place and recoverable volumes are shown in Table 4-3 and Table 4-4 respectively. The recovery factors are set with reference to analogues in nearby producing fields and provisional assumptions for potential development solutions.

Table 4-3 In-place resources in the Novus East Garn/Ile Fm + Tilje prospect and associated risk summary.

Resource Phase	P100	P90	Mean	P10	P0
Main: Oil (10^6 Sm^3)	1.2	2.0	3.95	6.86	10.8
Associated: Gas (10^9 Sm^3)	0.25	0.41	0.78	1.35	2.06
Main: Gas (10^9 Sm^3)	0.42	0.67	1.28	2.21	3.51
Associated: Condensate (10^6 Sm^3)	0.05	0.10	0.21	0.38	0.62
Total Resources (10^6 Sm^3 OE)	0.57	1.05	3.87	7.42	12.2

Case	P(case)
Oil	0.410
Gas	0.252
Oil & Gas	0.104
Success Discovery	0.766

Table 4-4 Recoverable resources in the Novus East Garn/Ile Fm + Tilje prospect.

Resource Phase	P100	P90	Mean	P10	P0
Main: Oil (10^6 Sm^3)	0.28	0.47	0.99	1.74	2.79
Associated: Gas (10^9 Sm^3)	0.06	0.09	0.20	0.34	0.53
Main: Gas (10^9 Sm^3)	0.19	0.32	0.68	1.19	2.01
Associated: Condensate (10^6 Sm^3)	0.02	0.04	0.09	0.17	0.31
Total Resources (10^6 Sm^3 OE)	0.26	0.49	1.16	2.0	3.23

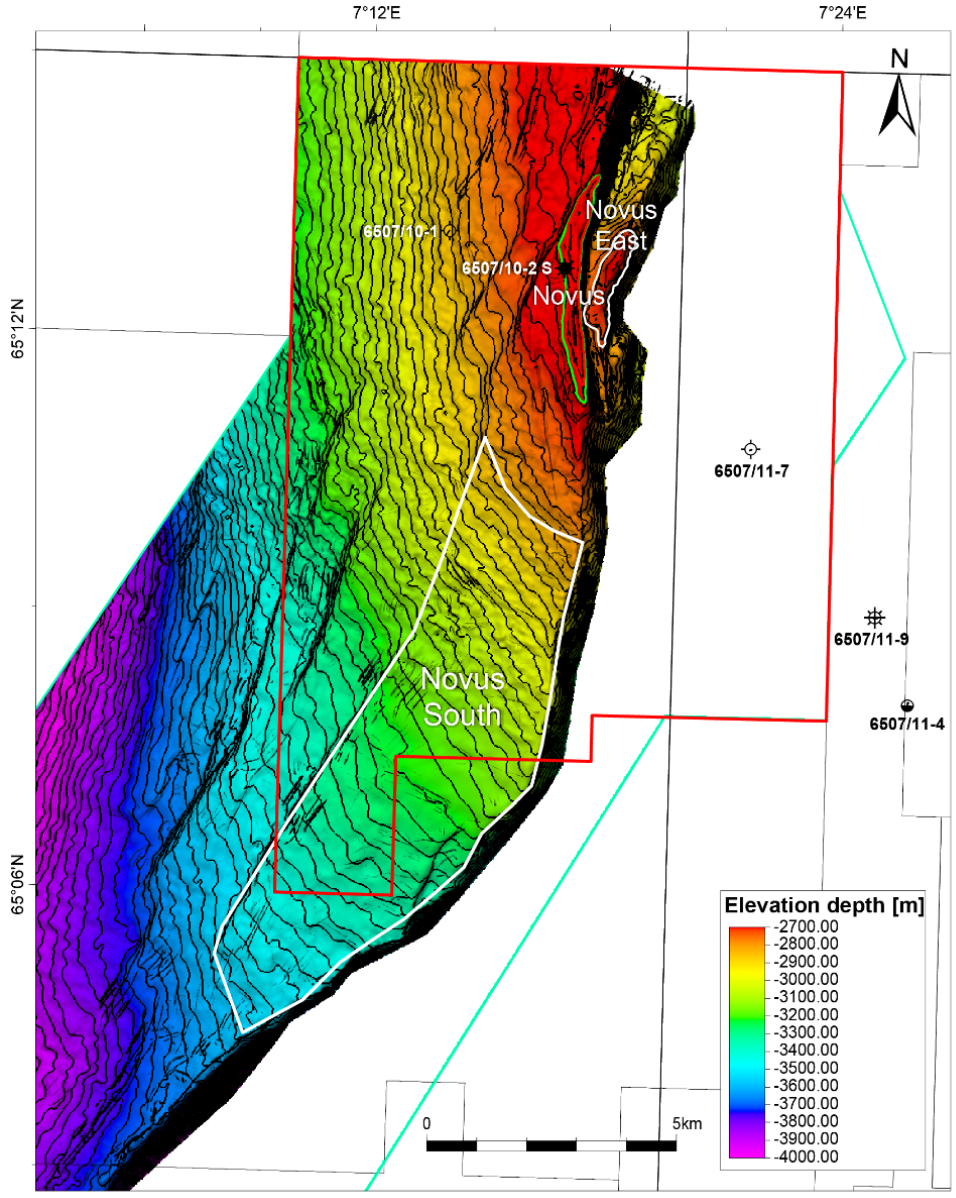

Figure 4-1: Top Garn Fm sandstone reservoir depth map

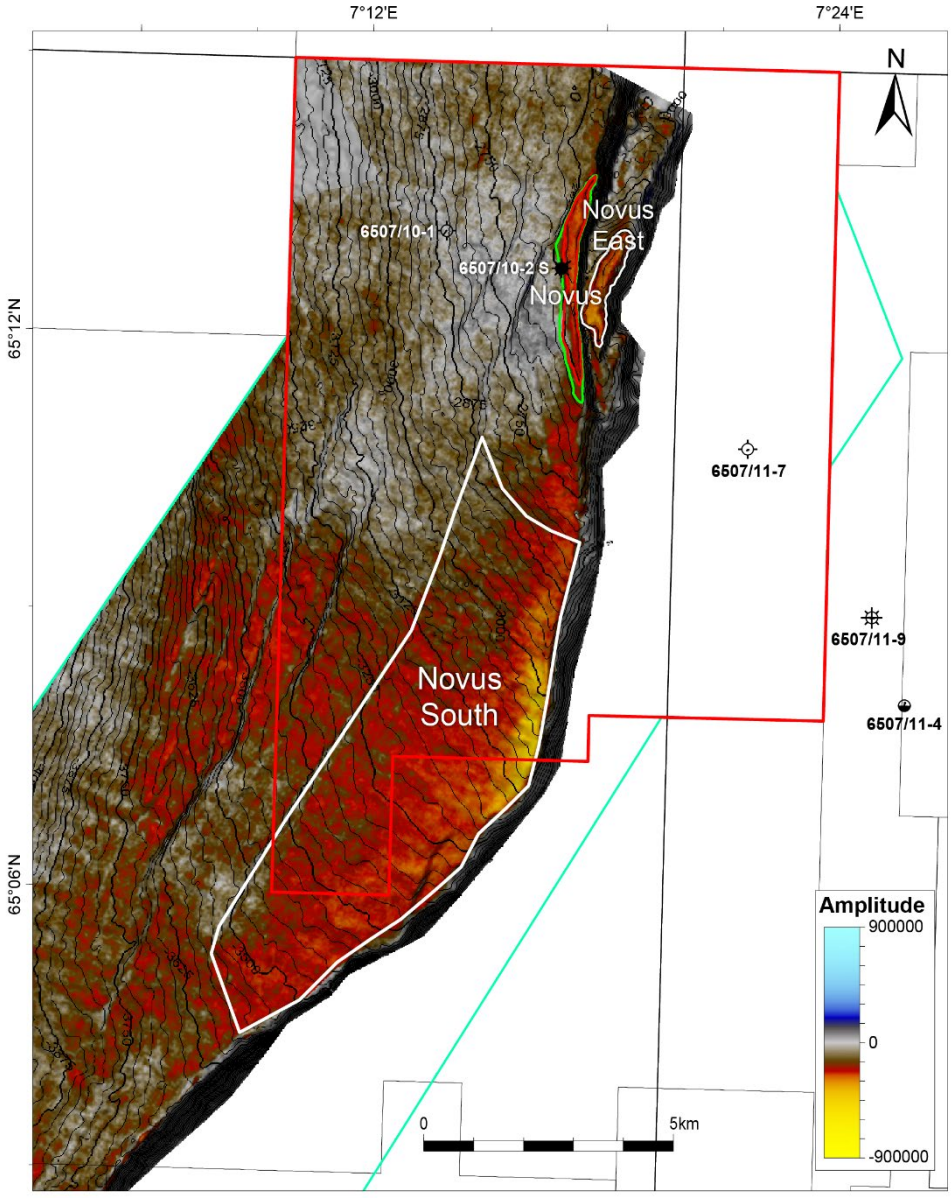

Figure 4-2: Top-Base Garn Fm. minimum amplitude map, PGS22M02 EEI16 Fluid Cube.

5 Technical evaluation

A technical and economic evaluation for the development of the Novus South prospect has been conducted for an exploration program including a wildcat exploration well and one follow-up appraisal well. Whilst the subsurface assessment predicts a small gas cap with deeper oil leg for the prospect, the oil phase has been considered the commercially interesting phase. The development solution assessed comprised a subsea tie-back to Heidrun TLP and included one 4-slot template with two horizontal oil producers and two deviated downflank water injectors. The template is tied back to Heidrun with 23 km production and water injection pipelines. The water depth is 300 m. The business case assumed an exploration well in 2025, appraisal well in 2026, and production start-up in 2032, depending on available capacity for oil production and water injection at the Heidrun installation.

Despite the high-volume potential prognosed for Novus South with deep hydrocarbon filling, the high negatively skewed volume distribution given the dependency on a weak stratigraphic trap element towards prospect apex results in the increased likelihood for sub-economic accumulations. In summary, the main concern is low Pc and the poor resulting exploration economics (close to zero). Hence a viable case for an exploration well could not be recommended by the Licence. Moreover, small changes and optimisation of the business case would not change the overall picture because the Pc is so low.

6 Conclusion

The work programme for PL1191 has been fulfilled. The main prospect (Novus South) has been evaluated within the specified time frame. Numerous geological and geophysical studies have been completed, communicated, and discussed in the Licence. Based on lack of attractive prospect opportunities (moderate hydrocarbon volumes and/or high geological risk) the PL1191 partnership agreed to drop the licence.

7 Appendix

Table 7-1: Novus South prospect data

Block	NO 6507/10	Prospect name	Novus South	Discovery/Prosp/Lead	Prospect	Prosp ID (or New!)	NOD will insert value	NPD approved (Y/N)	Yes
Play name	NOD will insert value	New Play (Y/N)	No	Outside play (Y/N)	No				
Oil, Gas or O&G case:	Oil&Gas	Reported by company	Equinor Energy AS	Reference document				Assessment year	2024
This is case no.:	1 of 1	Structural element	HALTEN TERRACE	Type of trap	Stratigraphic	Water depth [m MSL] (>0)	300	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)	2,28	1,51	17,64	43,31	0,03	0,00	1,03	2,64
	Gas [10^9 Sm^3] (>0.00)	0,10	0,01	3,79	9,74	0,50	0,45	3,87	9,47
Recoverable resources	Oil [10^6 Sm^3] (>0.00)	0,84	0,74	6,63	16,21	0,01	0,00	0,31	0,79
	Gas [10^9 Sm^3] (>0.00)	0,03	0,00	1,14	2,91	0,18	0,16	1,46	3,57
Reservoir Chrono (from)	Middle Jurassic	Reservoir litho (from)	Garn Formation	Source Rock, chrono primary	Upper Jurassic	Source Rock, litho primary	Spekk Formation	Seal, Chrono	Upper Jurassic
Reservoir Chrono (to)	Middle Jurassic	Reservoir litho (to)	Garn Formation	Source Rock, chrono secondary	Upper Jurassic	Source Rock, litho secondary	Melke Formation	Seal, Litho	Melke Formation
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	0,15	Oil case (0.00-1.00)	0,00	Gas case (0.00-1.00)	0,00	Oil & Gas case (0.00-1.00)	1,00		
Reservoir (P1) (0.00-1.00)	1,00	Trap (P2) (0.00-1.00)	0,15	Charge (P3) (0.00-1.00)	1,00	Retention (P4) (0.00-1.00)	1,00		

Parametres:	Low (P90)	Base	High (P10)	*Comments*
Depth to top of prospect [m MSL] (> 0)	2802	2802	2802	*Retention (P4) is included in Trap (P2).*
Area of closure [km^2] (> 0.0)	1,4	9,5	23,8	*DFI is applied in this prospect*
Reservoir thickness [m] (> 0)	19	36	52	
HC column in prospect [m] (> 0)	76	258	509	
Gross rock vol. [10^9 m^3] (> 0.000)	0,030	0,310	0,774	
Net / Gross [fraction] (0.00-1.00)	0,77	0,84	0,91	
Porosity [fraction] (0.00-1.00)	0,19	0,21	0,23	
Permeability [mD] (> 0.0)	1438,6	1943,6	2424,5	
Water Saturation [fraction] (0.00-1.00)	0,14	0,17	0,20	
Bg [Rm3/Sm3] (< 1.0000)	0,0000	0,0000	0,0000	
1/Bo [Sm3/Rm3] (< 1.00)	0,56	0,58	0,60	
GOR, free gas [Sm^3/Sm^3] (> 0)	3354	3678	4059	
GOR, oil [Sm^3/Sm^3] (> 0)	200	220	239	
Recov. factor, oil main phase [fraction] (0.00-1.00)	0,30	0,37	0,45	
Recov. factor, gas ass. phase [fraction] (0.00-1.00)	0,30	0,37	0,45	
Recov. factor, gas main phase [fraction] (0.00-1.00)	0,22	0,30	0,38	
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)	0,22	0,30	0,38	For NPD use:

Temperature, top res [°C] (>0)	100		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)	293		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. VSH < 0,4	2. PHIT > 0,1	3.				Kart nr	NPD will insert value

Table 7-2: Novus East Garn/Ile prospect data

Block	NO 6507/10	Prospect name	Novus East Garn/Ile	Discovery/Prosp/Lead	Prospect	Prosp ID (or New!)	NPD will insert value	NPD approved (Y/N)	
Play name	NPD will insert value	New Play (Y/N)		Outside play (Y/N)					
Oil, Gas or O&G case:	Oil	Reported by company	Equinor Energy AS	Reference document				Assessment year	2022
This is case no.:	1 of 1	Structural element	Halten Terrace	Type of trap	Faulted four-way	Water depth [m MSL] (>0)	297	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)	1,60	2,02	3,36	5,73				
	Gas [10^9 Sm^3] (>0.00)					0,33	0,36	0,66	1,12
Recoverable resources	Oil [10^6 Sm^3] (>0.00)	0,38	0,48	0,84	1,46				
	Gas [10^9 Sm^3] (>0.00)					0,08	0,10	0,17	0,29
Reservoir Chrono (from)	Middle Jurassic	Reservoir litho (from)	Garn Fm	Source Rock, chrono primary	Upper Jurassic	Source Rock, litho primary	Spekk Fm	Seal, Chrono	Jurassic Upper
Reservoir Chrono (to)	Middle Jurassic	Reservoir litho (to)	Ile Fm	Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Melke Fm
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	0,55	Oil case (0.00-1.00)	0,60	Gas case (0.00-1.00)	0,40	Oil & Gas case (0.00-1.00)	0,00		
Reservoir (P1) (0.00-1.00)	1,00	Trap (P2) (0.00-1.00)	0,68	Charge (P3) (0.00-1.00)	0,81	Retention (P4) (0.00-1.00)	1,00		

Parametres:	Low (P90)	Base	High (P10)
Depth to top of prospect [m MSL] (> 0)	2720	2720	2720
Area of closure [km^2] (> 0.0)	0,8	1,0	1,1
Reservoir thickness [m] (> 0)	113	126	139
HC column in prospect [m] (> 0)	54	77	107
Gross rock vol. [10^9 m^3] (> 0.000)	0,023	0,046	0,077
Net / Gross [fraction] (0.00-1.00)	0,63	0,68	0,73
Porosity [fraction] (0.00-1.00)	0,20	0,23	0,26
Permeability [mD] (> 0.0)	1500,0	2000,0	2500,0
Water Saturation [fraction] (0.00-1.00)	0,24	0,28	0,32
Bg [Rm3/Sm3] (< 1.0000)			
1/Bo [Sm3/Rm3] (< 1.00)	0,57	0,66	0,75
GOR, free gas [Sm^3/Sm^3] (> 0)			
GOR, oil [Sm^3/Sm^3] (> 0)	174	199	225
Recov. factor, oil main phase [fraction] (0.00-1.00)	0,20	0,25	0,30
Recov. factor, gas ass. phase [fraction] (0.00-1.00)	0,20	0,25	0,30
Recov. factor, gas main phase [fraction] (0.00-1.00)			
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)			
Temperature, top res [°C] (>0)	96		
Pressure, top res [bar] (>0)	290		
Cut off criteria for N/G calculation	1. VSH< 40%	2. POR >0.1	

Comments: Retention (P4) is included in Trap (P2). DFI is applied in this prospect. The volumes are calculated for an oil case only.

For NPD use:					
Innrapp. av geolog-init:	NPD will insert value	Registrert - init:	NPD will insert value	Kart oppdatert	NPD will insert value
Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
				Kart nr	NPD will insert value

Table 7-3: Novus East Tilje prospect data

Block	6507/10	Prospect name	Novus East Tilje	Discovery/Prosp/Lead	Prospect	Prosp ID (or New!)	NPD will insert value	NPD approved (Y/N)	
Play name	NPD will insert value	New Play (Y/N)		Outside play (Y/N)					
Oil, Gas or O&G case:	Oil	Reported by company	Equinor Energy AS	Reference document				Assessment year	2022
This is case no.:	1 of 1	Structural element	Halten Terrace	Type of trap	Faulted four-way (r	Water depth [m MSL] (>0)	297	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 [106 Sm3] (>0.00)	2,13	2,61	2,73	3,37				
	Gas [109 Sm3] (>0.00)					0,44	0,53	0,54	0,65
Recoverable resources	Oil [106 Sm3] (>0.00)	0,49	0,64	0,68	0,90				
	Gas [109 Sm3] (>0.00)					0,10	0,13	0,14	0,17
Reservoir Chrono (from)	Early Jurassic	Reservoir litho (from)	Tilje Fm	Source Rock, chrono primary	Upper Jurassic	Source Rock, litho primary	Spekk Fm	Seal, Chrono	Jurassic Lower
Reservoir Chrono (to)	Early Jurassic	Reservoir litho (to)	Tilje Fm	Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Ror Fm
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	0,55	Oil case (0.00-1.00)	0,60	Gas case (0.00-1.00)	0,40	Oil & Gas case (0.00-1.00)	0,00		
Reservoir (P1) (0.00-1.00)	1,00	Trap (P2) (0.00-1.00)	0,68	Charge (P3) (0.00-1.00)	0,81	Retention (P4) (0.00-1.00)	1,00		

Parametres:	Low (P90)	Base	High (P10)
Depth to top of prospect [m MSL] (> 0)	2858	2858	2858
Area of closure [km2] (> 0.0)	0,5	0,6	0,7
Reservoir thickness [m] (> 0)	113	126	139
HC column in prospect [m] (> 0)	92	92	92
Gross rock vol. [109 m3] (> 0.000)	0,033	0,037	0,041
Net / Gross [fraction] (0.00-1.00)	0,63	0,68	0,73
Porosity [fraction] (0.00-1.00)	0,20	0,23	0,26
Permeability [mD] (> 0.0)	1500,0	2000,0	2500,0
Water Saturation [fraction] (0.00-1.00)	0,24	0,28	0,32
Bg [Rm3/Sm3] (< 1.0000)			
1/Bo [Sm3/Rm3] (< 1.00)	0,57	0,66	0,75
GOR, free gas [Sm3/Sm3] (> 0)			
GOR, oil [Sm3/Sm3] (> 0)	174	199	225
Recov. factor, oil main phase [fraction] (0.00-1.00)	0,20	0,25	0,30
Recov. factor, gas ass. phase [fraction] (0.00-1.00)	0,20	0,25	0,30
Recov. factor, gas main phase [fraction] (0.00-1.00)			
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)			

Comments: Retention (P4) is included in Trap (P2). DFI is applied in this prospect. Volumes calculated are for an oil case only.

For NPD use:							
Temperature, top res [oC] (>0)	102		Innrapp. av geolog-init:	NPD will insert value	Registrert - init:	NPD will insert value	Kart oppdatert	NPD will insert value
Pressure, top res [bar] (>0)	290		Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	1. VSH< 40%	2. POR >0.1					Kart nr	NPD will insert value

Table 7-4: Novus discovery data

Block	6507/10	Prospect name	Novus	Discovery/Prosp/Lead	Discovery	Prosp ID (or New!)	NPD will insert value	NPD approved (Y/N)	
Play name	NPD will insert value	New Play (Y/N)		Outside play (Y/N)					
Oil, Gas or O&G case:	Oil&Gas	Reported by company	Equinor Energy AS	Reference document				Assessment year	2022
This is case no.:	1 of 1	Structural element	HALTEN TERRACE	Type of trap	Structural/Stratigra	Water depth [m MSL] (>0)	297	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 [106 Sm3] (>0.00)	0,91	1,40	1,39	1,90	0,06	0,08	0,09	0,12
	Gas [109 Sm3] (>0.00)	0,29	0,39	0,42	0,55	0,18	0,22	0,28	0,39
Recoverable resources	Oil [106 Sm3] (>0.00)	0,21	0,31	0,35	0,50	0,03	0,04	0,04	0,06
	Gas [109 Sm3] (>0.00)	0,17	0,22	0,25	0,34	0,04	0,06	0,07	0,10
Reservoir Chrono (from)	Middle Jurassic	Reservoir litho (from)	Garn Fm	Source Rock, chrono primary	Upper Jurassic	Source Rock, litho primary	Spekk Fm	Seal, Chrono	Upper Jurassic
Reservoir Chrono (to)	Middle Jurassic	Reservoir litho (to)	Garn Fm	Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Melke Fm
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	1,00	Oil case (0.00-1.00)	0,00	Gas case (0.00-1.00)	0,00	Oil & Gas case (0.00-1.00)	1,00		
Reservoir (P1) (0.00-1.00)	1,00	Trap (P2) (0.00-1.00)	1,00	Charge (P3) (0.00-1.00)	1,00	Retention (P4) (0.00-1.00)	1,00		
Parametres:				*Comments*					
Depth to top of prospect [m MSL] (> 0)	2575	2575	2575						
Area of closure [km2] (> 0.0)	1,1	1,5	1,8						
Reservoir thickness [m] (> 0)	20	25	30						
HC column in prospect [m] (> 0)	40	43	45						
Gross rock vol. [109 m3] (> 0.000)	0,018	0,023	0,029						
Net / Gross [fraction] (0.00-1.00)	0,95	0,97	0,98						
Porosity [fraction] (0.00-1.00)	0,22	0,23	0,25						
Permeability [mD] (> 0.0)	1684,2	3265,5	5171,8						
Water Saturation [fraction] (0.00-1.00)	0,14	0,17	0,20						
Bg [Rm3/Sm3] (< 1.0000)	0,0044	0,0050	0,0057						
1/Bo [Sm3/Rm3] (< 1.00)	0,59	0,59	0,59						
GOR, free gas [Sm3/Sm3] (> 0)	4243	4762	5425						
GOR, oil [Sm3/Sm3] (> 0)	174	199	225						
Recov. factor, oil main phase [fraction] (0.00-1.00)	0,20	0,25	0,30						
Recov. factor, gas ass. phase [fraction] (0.00-1.00)	0,20	0,25	0,30						
Recov. factor, gas main phase [fraction] (0.00-1.00)	0,55	0,60	0,65						
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)	0,45	0,50	0,55	For NPD use:					
Temperature, top res [oC] (>0)	96			Innrapp. av geolog-init:	NPD will insert value	Registrert - init:	NPD will insert value	Kart oppdatert	NPD will insert value
Pressure, top res [bar] (>0)	284			Dato:	NPD will insert value	Registrert Dato:	NPD will insert value	Kart dato	NPD will insert value
Cut off criteria for N/G calculation	PHIT>0.1	VSH<0.4	3					Kart nr	NPD will insert value