PL997 Status Report

Norske Shell

2023

CONTENTS

1. PL997 HISTORY

PL997 is located in the Rås Basin, East of the Ormen Lange Field. The license area covers blocks 6305/11 and 6305/9, and parts of blocks 6305/5, 6305/6, 6305/7, and 6305/8 (Ref. Fig. 1). The license was awarded to A/S Norske Shell (Operator 35%), Equinor (35%), and INEOS E&P Norge (now PGNiG Upstream Norway, 30%) on 01.03.2019. The first license milestone was a Data or Drop OR Drill or Drop decision to be taken February 2021.

The commitment work programme has been completed and as part of this the license carried out G&G studies including use of the re-processed SH19M01 3D seismic dataset in the evaluation of the PL997 prospectivity. Additionally, re-processing of selected 2D lines was carried out and used in the evaluation of the Hval lead. After the initial 2-year period, a decision on data or drop or drill or drop was required. Based on the evaluation it was decided to not acquire further 3D seismic over the Hval lead, particularly as it is already partly covered by the SH19M01 data which was used in its evaluation.

However, a nearby well (Ormen Lange Deep, 6305/5-C-3 H) was to be drilled the following year (2022) targeting the same Turonian play as the main leads in PL997. In addition, a new lead (Phantom) had been proposed by INEOS/PGNiG, covered by new re-processed seismic (MC3D-MOEREINER21). Thus, the license applied for a 2-year license extension to enable integration of new well data and acquire the new seismic for further evaluation. The extension was granted with a Drill or Drop decision 1 March 2023.

The license initially proposed to do a merge of MC3D-MOEREINER21 data with the SH19M01 data but concluded that it was not contributing to the evaluation of Phantom. This was agreed with OED, and exception was granted.

The Ormen Lange Deep well did not provide evidence for significant Turonian sands being deposited basinwards of the PL997 license, however the well results have been used in a new seismic inversion. The Phantom lead was evaluated to have limited volume and high risk.

Jazz was the only opportunity described as a prospect in the APA application, though has since been reduced in volume. The identified leads, Wheeljack, Cliffjumper, Phantom, Hval, Kolle, and Ormen Korte were evaluated but the data do not suggest viable drillable opportunities. Low Pg or low volumes are the basis for the partner decision to not continue PL997 after the Drill or Drop milestone March 2023.

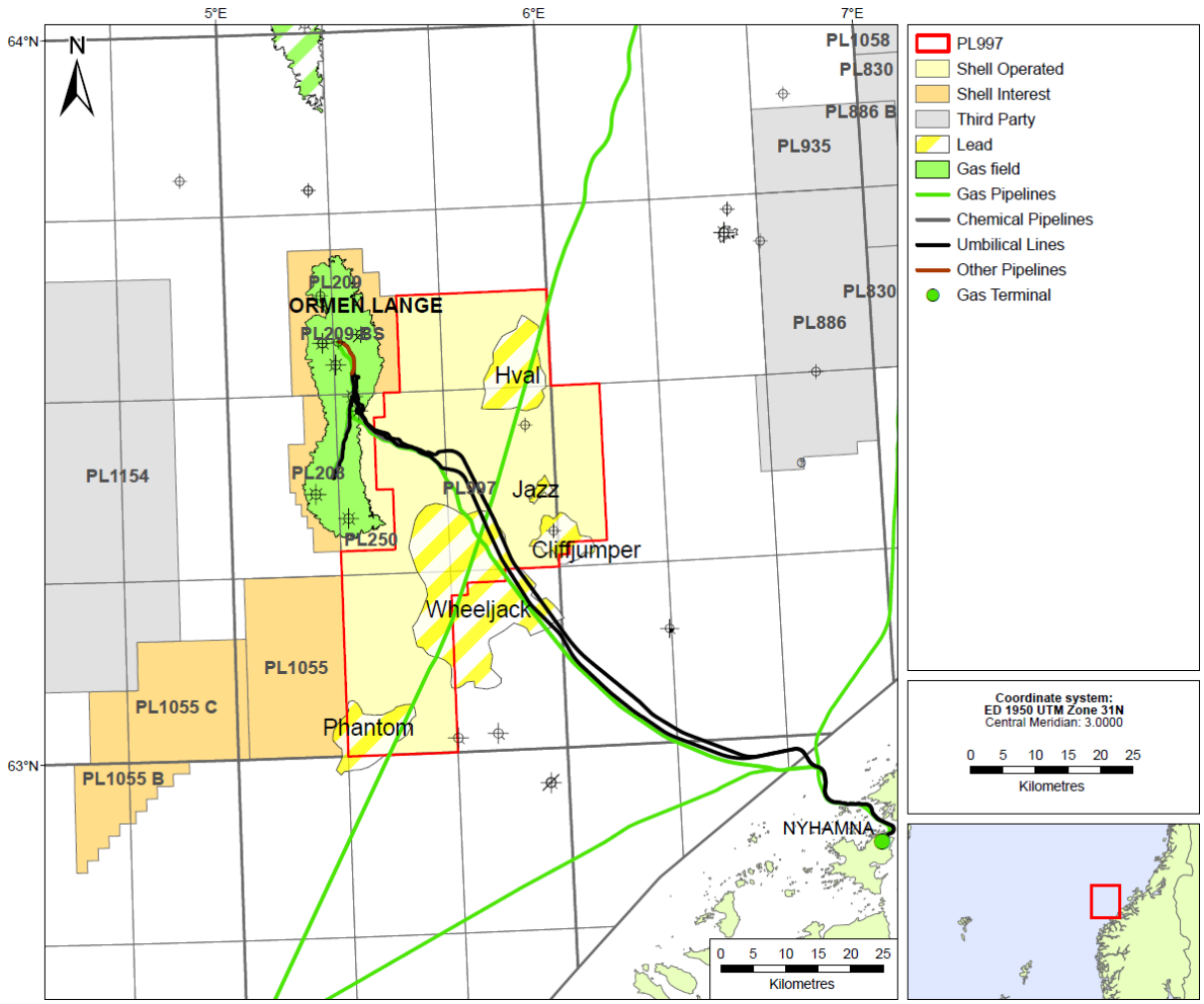


FIGURE 1 *Location map of PL997 with current portfolio*

1 STATUS OF WORK COMMITMENT

The firm work programme in the first 2-year phase consisted of reprocessing and evaluating 2D seismic over the Hval lead, evaluate the new 3D SH19M01, quantitative seismic interpretation, and updated volumes and risks. An application of extension was granted to include the upcoming well (6305/5-C-3 H) in the evaluation. In the extension period, the work programme included integrating 6305/5-C-3 H, acquiring new re-processed 3D seismic (MC3D-MOEREINER21) to evaluate the new Phantom lead, updated seismic inversion and special studies. Initially the license proposed to do a merge of MC3D-MOEREINER21 data with the SH19M01 data but concluded that it was not contributing to the evaluation of Phantom. This was agreed with OED, and exception was granted.

2 LICENSE MEETINGS

The following PL997 meetings have been held:

03.05.2019	EC/MC meeting #1 – Start-up meeting
06.11.2019	EC/MC meeting #2
30.04.2020	EC work meeting #1
07.10.2020	EC work meeting #2
17.11.2020	EC/MC meeting #3
25.11.2021	EC/MC meeting #4
29.06.2022	EC/MC meeting #5
30.11.2022	EC/MC meeting #6
09.02.2023	EC/MC meeting #7 – Recommendation to relinquish

3 EXPLANATION OF GROUNDS FOR LAPSE

A technical summary for the evaluations is given in table 1. No drillable prospects have been identified, and the partnership has agreed to relinquish the license.

TABLE 1 *Outcome of Technical Evaluation*

Name	Play	Status in APA / Current status	Outcome of Technical Evaluation
Jazz	Turonian	Prospect / Prospect	The Jazz prospect was seen as the main opportunity due to its geological setting, amplitude characteristics and geometry. The target reservoir of the Jazz prospect is the deepwater Lysing sandstone of Turonian age. Jazz is now understood to be several small traps with amplitude brightening at the crest in a polygonal faulted area. Volume have been estimated for the largest of the traps. The Jazz volume has decreased since application, however probability of success has increased. Development of these smaller accumulations would be difficult due to probable compartmentalization and unknown connectivity between the smaller closures.
Wheeljack	Turonian	Lead / Lead	The Wheeljack lead is defined by an updip stratigraphic trap with potential fault(s). The Wheeljack lead is located basinwards of an inferred Turonian feeder system. After evaluation, the updip fault observed at the edge of the 3D, and on 2D seismic, indicates possibility of a relay ramp between faults, and not 1 larger fault. The lead is located within dipping layers with no clear up-dip trapping element, hence it is believed highly risky and thus has a low POS. In addition, significant crestal parts of opportunity sits outside license.

			Seismic inversion indicated patchy response, not conformable with structure. However, as the patchy response is observed until the up-dip fault(s), a fracture gradient study was conducted to evaluate if the caprock could hold a column from fault(s) to structural spill, as well as a basin model study to evaluate if the structure could be filled to spill. Multiple scenarios were run in both studies, and both concluded that scenarios exist where the full structure was filled and caprock sealing.
Cliffjumper	Turonian	Lead /Lead	The Cliffjumper lead is defined by a series of smaller faults down-dip and towards the edges of the lead. Up-dip, the lead is stratigraphically trapped. Due to the lead's small GRV and patchy amplitude response, the lead is not worked further.
Phantom	Turonian	New /Lead	The Phantom lead is defined by a sealing fault but is dependent on a stratigraphic trap at the crestal area of the structure. The Phantom lead is believed to be defined by a different feeder than the other Turonian leads, though with same provenance. The lead is located directly over the Gossa High. Slight thickening is observed in seismic, with patchy amplitude response.
Hval	Springar	Lead / Lead	The Hval lead is defined by lower seismic frequency and moderate amplitude anomaly on the Slope from Slørebotn to Ormen Lange Dome of Maastrichtian age. The Springar fan is conceptually deposited on the terrace between Slørebotn and Ormen Lange Dome. The trap is based on concept of up-dip shale-out. Trapping challenge in this setting, requires up-dip seal: shale-out lateral to the fan; and shale-out back to the feeder channel. After re-evaluation, risks resonate with earlier evaluation, though volumes are reduced compared to APA (GRV and net sand reduction).
Kolle	Egga/ Springar	Lead / Lead	The Kolle lead is located in the fairway for sediment transport to the Ormen Lange field and is a 3-way dipping structure which requires a stratigraphic up-dip seal at the Egga level. Stratigraphic trapping was key risk. After reprocessing of 3D seismic, seismic inversion shows no anomaly at the Kolle location and was thus not pursued.
Ormen Korte	Egga/ Springar	Lead /Lead	The Ormen Korte was original amplitude anomaly at the Egga level, underneath the area of the seabed escarpment, and there was thus a risk of artefacts in the seismic data. The Ormen Korte lead requires a stratigraphic trapping element to work. After reprocessing of 3D seismic, seismic inversion shows no anomaly at the Ormen Korte location and was thus not pursued.

2. DATABASE

1 COMMON WELL DATABASE

Wells used in the technical evaluation and resource assessment for the license area are shown in table 2 and figure 2.

TABLE 2 *Wells Database – Offset wells used in the evaluation*

Well name	Common Name	NPDID	Drilled year (TD)	Result
6305/1-1	Ormen Lange North	3555	1998	Dry
6305/5-1	Ormen Lange	3144	1997	Gas
6405/10-1	Midnattsol	5565	2007	Gas
6405/7-1	Elida	4749	2003	oil
6404/11-1	Havsule	4465	2002	Dry
6305/9-2	Dovregubben	6502	2011	Dry
6305/9-1	Blåveis	4297	2001	Dry
6305/12-1	C-prospect	1808	1991	Shows
6306/10-1	Skalmen	1551	1990	Oil /Gas shows
6305/12-2	Cretaceous wedge and E-prsopect	2207	1993	Shows
6205/3-1 R	B-prospect	1510	1989	Dry
6204/11-1		2205	1994	Gas
6204/10-1	J-prospect	2666	1995	Dry
6204/10-2	L-prospect and Q-prospect	2952	1997	Gas
6305/5-C-3 H	Ormen Lange Deep	6661	2022	Dry

2 COMMON SEISMIC DATABASE

2D and 3D seismic data were used in the evaluation of the prospect and leads. The main dataset used was the reprocessed dataset, SH19M01. A summary of the seismic utilized in the evaluation of PL997 is sown in table 3 and figure 2.

TABLE 3 *Common Seismic Database – 2D and 3D seismic surveys used in the evaluation of PL997*

Survey name	NPDID	3D/2D	Aquisition/Repro year	Operator/owner
SH19M01 *		3D	2019	A/S Norske Shell
MC3D-MOERINER21		3D	2021	INEOS
MNR04	4252	2D	2004	TGS/Spectrum
MNR05	4298	2D	2005	TGS/Spectrum
MNR06	4364	2D	2006	TGS/Spectrum
MNR07	4450	2D	2007	TGS/Spectrum
MNR08	4571	2D	2008	TGS/Spectrum
MNR09	7001	2D	2009	TGS/Spectrum
MNR10	7224	2D	2010	TGS/Spectrum
MNR11	7389	2D	2011	TGS/Spectrum
MC2D-OLE2003	4207	2D	2003	PGS
ST98	3951	2D	1998	Statoil
SG9308	3616	2D	1993	Statoil (old Saga Petroleum)
ST8705	3049	2D	1987	Statoil
GFB-84	2607	2D	1984	WesternGeco
GMT-84	2609	2D	1984	WesternGeco
OLE2003-SHR20		2D	2020	A/S Norske Shell

*SH19M01: reprocessed seismic (see table 4 below)

TABLE 4 *SH19M01 underlying merged data used in the evaluation of PL997*

Survey name	NPDID	3D/2D	Aquisition/Repro year	Operator/owner
SH14001	8042	3D	2014	Shell
NH9602	3784	3D	1996	Norsk Hydro
OLSE98	3915	3D	1998	PGS
AX0801	4507	3D	2008	Aker Exploration
Moere3D	4109	3D	2001	CGG

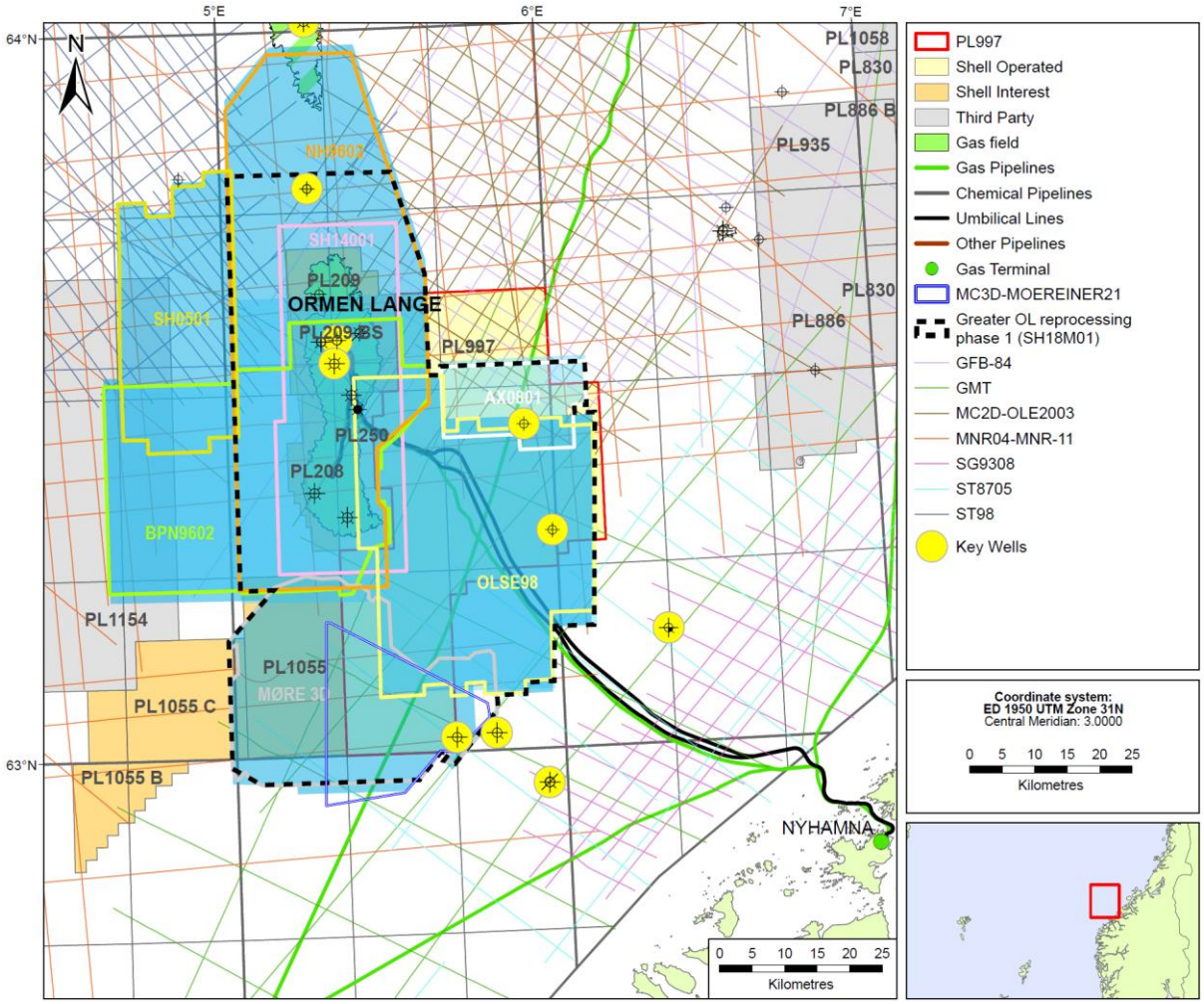


FIGURE 2 *Seismic database for PL997*

3. RESULTS OF GEOLOGICAL AND GEOPHYSICAL STUDIES

1 GENERAL GEOLOGICAL AND GEOPHYSICAL STUDIES

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

TABLE 5 *Summary of G&G studies carried out and results*

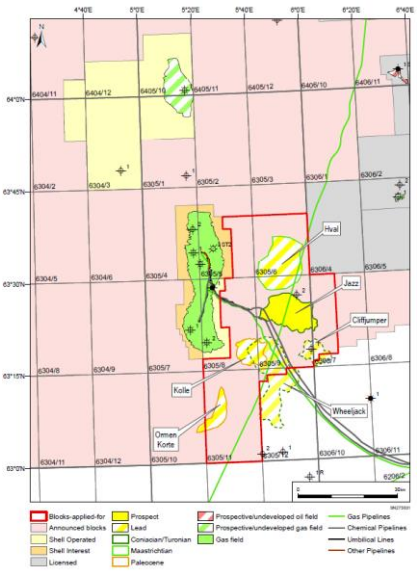
Study	Comments & Results
Re-processing and merge, velocity model update	In-house seismic re-processing of regional 3D merged dataset (SH19M01) and seismic velocity model update. The broadband processing resulted in an improved dataset: - Increased bandwidth in the data - Improved imaging in the shallow and deep - Calibrated velocities - Improved phase behavior - More balanced amplitude laterally and in time (vertically) - Updated velocity model
Re-processing of selected 2D lines	In-house seismic re-processing of selected 2D lines outside existing 3D coverage to address 3D data or drop issues with relevance to the Hval lead. The 2D reprocessing resulted in an improved dataset: - Effective demultiple sequence - Significantly improves resolution in the overburden - Improve signal-to-noise at target - Optimized bandwidth
Seismic interpretation, spectral decomposition, and Gross Depositional Model Update	Seismic of key horizons were re-evaluated using the new reprocessed data. This resulted in a new set of time and depth structure maps of the following horizons: Seabed, Kai, Balder, Våle, Nise, Turonian, Cenomanian. These horizons were used to inspect the new seismic and create spectral decomposition on various levels to look for features that can aid the recognition and interpretation of depositional features. Detailed fault interpretation and seismic features helped defining the new Jazz outline. Additionally, the maps were used in an updated of the basin model. The seismic calibration with wells within this new large dataset altered the view of reservoir and hydrocarbon fill potential. The results of the visualization techniques were also still ambiguous but allowed a cleared comparison between opportunities that originally were in different seismic datasets, as well as integrating the Ormen Lange Deep well results.
Basin model update	In-house basin modelling. Approach: model calibration to VR, temperature, pressure data, density logs; using only Spekk Type 2 source rock. Observations: - Spekk Fm is present day overmature in the Ormen Lange area since approximately 50Ma - The data supports the general expectations that any identified trap with reservoir within the license boundaries should receive similar charge as observed in the Ormen Lange Field - Scenario modelling with different migration potential and trap configurations helped understanding possible fill potential.

Rock property updates, seismic quantitative evaluation	Rock physics and AVO inversion screening was performed in two iterations, first in 2018/19 and then an update was done in end 2022 to integrate Ormen Lange Deep well results. After the first rock physics and AVO inversion screening, the Danian and Maastrichtian leads were not continued as neither showed any positive response for hydrocarbon filling. The Turonian portfolio (i.e., Jazz, Wheeljack and Cliffjumper) were studied further.
Subsurface evaluation, including volumes and risk assessment	Evaluation pre-Ormen Lange Deep Well. The Turonian portfolio (i.e., Jazz, Wheeljack and Cliffjumper) show similar seismic responses and anomalies were undrilled and uncalibrated. The Danian portfolio (i.e., Ormen Korte and Kolle) show limited/no response on current dataset, and not brought forward due to poor trap definition. The Springar portfolio (Hval) show patchy response on 3D survey.
In the extension period leading up to March 1st 2023, the following work has been carried out:	
Acquired the new re-processed seismic (MC3D-MOEREINER21) and used for the evaluation of the new Phantom lead	An evaluation of the Phantom lead was performed on the MC3D-MOEREINER21 and SH19M01 datasets. The MC3D-MOEREINER21 dataset has allowed detailed interpretation of the Phantom lead and has allowed an alternative to the SH19M01 data, particularly a more detailed fault analysis. Evaluation of Phantom has so far not provided clear evidence for well developed reservoir or trapped hydrocarbons. The lead is dependent on an updip stratigraphic trapping. Without indication of a contact, it currently has a low POS.
Integrated data from the Ormen Lange Deep well (6305/5-C-3 H) in the re-evaluation of the Turonian leads	From Top Coniacian one observe higher amplitude values related to a transition from shale to gas bearing siltstons. This interval shows best correlation to synthetic seismogram. Correlation from Ormen Lange Deep well can be made to Turonian portfolio, though overall there is a poor correlation for 6305/5-C-3 H seismic to well-tie.
Tested basin modelling fill scenarios for PL997 leads	Assessment of hydrocarbon filling in Jazz and Wheeljack. Gas filled stratigraphic trap at Jazz in model, charged from Spekk as the main source. Main expulsion in Late Cretaceous, in PL997 area expulsion until early Paleocene. In the event of extensive carrier beds, Wheeljack would be filled to structural spill, depending on lithologies/permeabilities. Jazz is positioned in migration shadow and depends on local drainage and would thus have charge limitations. However, in the case that Wheeljack trap works and is filled, hydrocarbons would likely spill to Jazz. In the event of limited carrier bed, both Wheeljack and Jazz would be underfilled. Marginal effect on Jazz, only slightly less than with extensive carrier bed.
Evaluated fracture gradient for long HC columns	A quick assessment of the Wheeljack lead was carried out to help with assessment of the seal capacity with respect to hydraulic failure. Uncertainty whether caprock (or fault barrier) can hold large hydrocarbon column.
Seismic inversion, detailed seismic interpretation and update of volumes and POS for the Jazz lead and view of the Wheeljack and Cliffjumper leads	In-house updated deterministic inversion of SH19M01 post-Ormen Lange Deep well. General observations from inversion: - No clear evidence of good quality sands with gas in the PL997 area - Benchmark of anomalies against Ormen Lange shows PL997 could be tight rocks - Gas presence cannot be ruled out but concerns about reservoir quality exists

2 PROSPECT UPDATE REPORT

The slope setting with the seismic anomalies from which the leads have been identified, have been challenging to understand. It is believed the anomalies represent migrating hydrocarbons through dipping layers consisting of siltstone and possible variable sandstones. Identifying clearly defined traps has been the main challenge along with the uncertainty of quantity and distance of sand deposition into the basin.

Figure 3 shows a map with the location of prospect and leads at the time of the APA application, as well as the resource table.



Discovery/ Prospect/ Lead name [1]	D/ P/ L [2]	Case (Oil/ Gas/ Oil&Gas) [3]	Unrisked recoverable resources [4]						Probability of discovery [5] (0.00 - 1.00)	Resources in acreage applied for [%] [6] (0.0 - 100.0)	Reservoir		Nearest relevant infrastructure [8]	
			Oil [10^6Sm^3] (>0.00)			Gas [10^9Sm^3] (>0.00)					Litho-/ Chrono-stratigraphic level [7]	Reservoir depth [m MSL] (>0)	Name	Km (>0)
			Low (P90)	Base (Mean)	High (P10)	Low (P90)	Base (Mean)	High (P10)						
Jazz	P	Gas	0.20	1.00	2.20	2.70	12.50	26.40	0.10	100.0	Lysing Fm/ Upper Cretaceous	3300	Ormen Lange	26
Hval	L	Gas	0.20	1.30	2.90	2.80	19.20	43.60	0.09	100.0	Springar Fm/ Upper Cretaceous	2925	Ormen Lange	22
Kolle	L	Gas								100.0	Egga Fm/ Paleocene	2580	Ormen Lange	18
Ormen Korte	L	Gas								100.0	Egga Fm/ Paleocene	2780	Ormen Lange	29
Wheeljack	L	Gas								55.0	Lysing Fm/ Upper Cretaceous	2700	Ormen Lange	29
Cliffjumper	L	Gas								50.0	Lysing Fm/ Upper Cretaceous	2850	Ormen Lange	36

FIGURE 3 *From APA application: map with location of prospect and leads, and resource table (NPD table 2)*

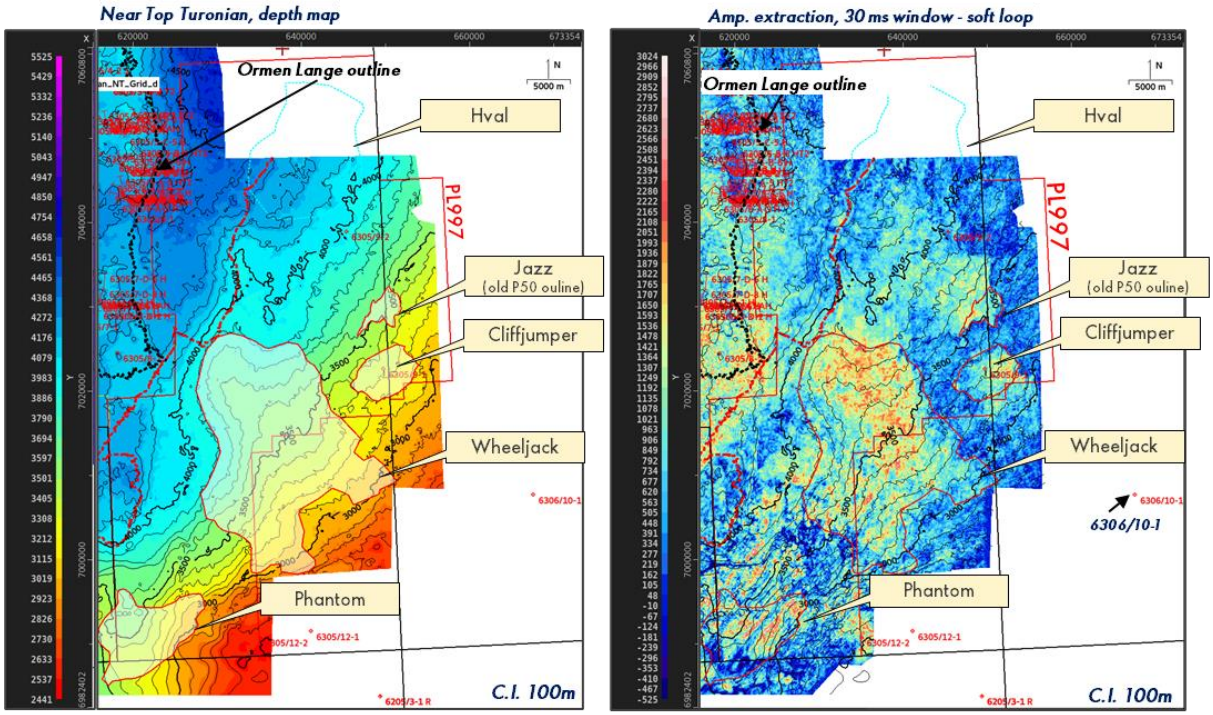


FIGURE 4 *(left) Shows Near Top Turonian depth map of portfolio in PL997 (note that the target for Hval is not Turonian but is showed for location purposes only); (right) Shows amplitude extraction of a 30ms window centered on the soft loop.*

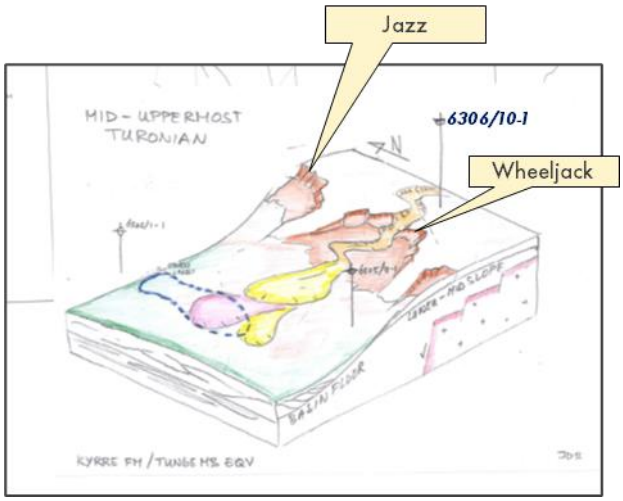


FIGURE 5 *A conceptual model of Mid-Uppermost Turonian – slump scar with channel(s). An alternative model for Jazz: slump scar trapping variable grain fractions from pelagic background sedimentation and distal/lateral turbidites – either silt dominated or possibly interbedded with coarser content.*

Jazz Prospect

Originally the most interesting lead. Sharp amplitude dimming around edges, laterally and up-dip, possible slump scar. The new evaluation indicates that the greater Jazz consists of many smaller fault bounded traps. The larger one of these is has a more confident amplitude indication for gas – cannot distinguish high porosity reservoir from poor (silt) on seismic. The new volume for Jazz is reduced to 1.5 BCM mean recoverable, POS increased to 0.31.

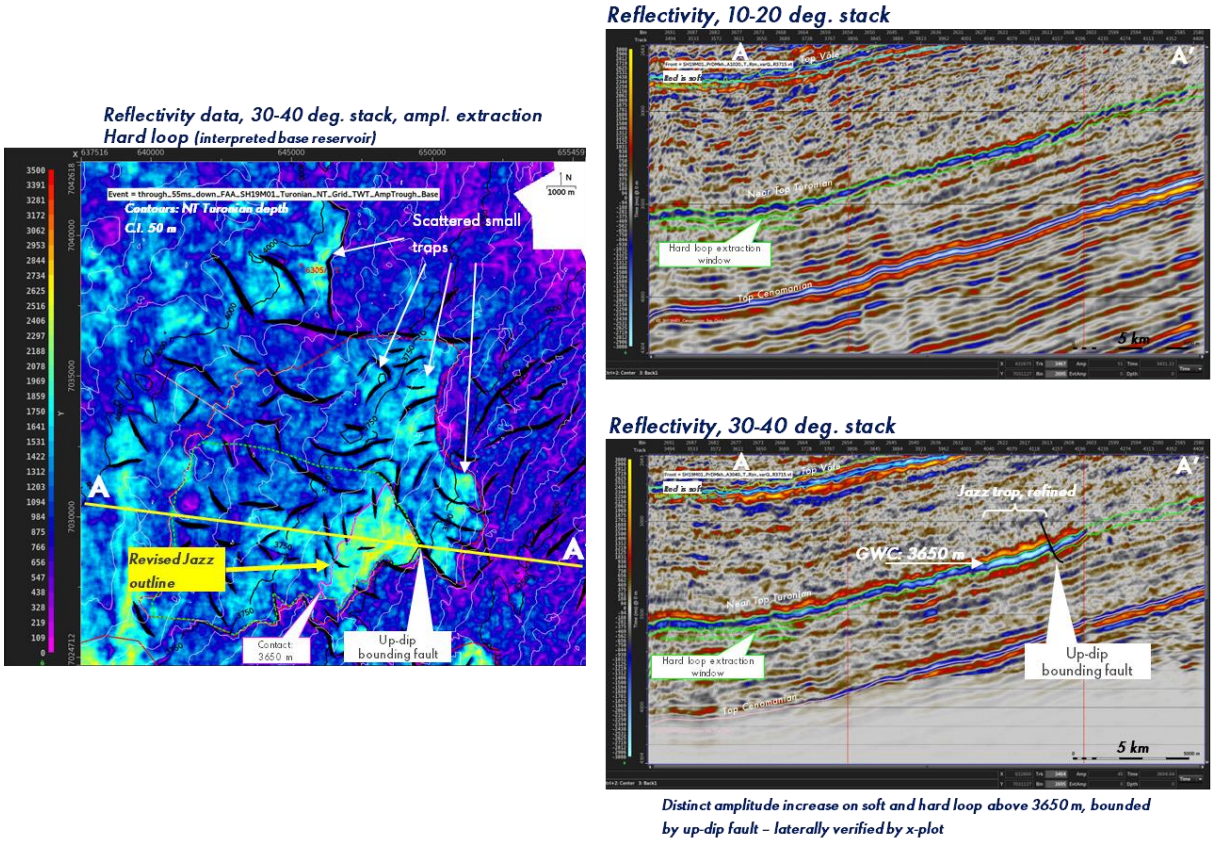


FIGURE 6 *(left) Amplitude map with fault interpretation. (right) 2 seismic sections showing the up-dip amplitude shut off at the bounding fault*

Wheeljack Lead

Wheeljack is the largest seismic anomaly with the largest volume potential in the license. However, trap and reservoir presence are highly uncertain. It is located within dipping layers, with no clear trap within the license boundary, only minor faults (short length and low throw). Lack of clear seismic amplitude up-dip shut-off represents a large risk. There is a trap potential represented by a fault system ~15km South-East of the license boundary. Due to the dipping layers a large hydrocarbon column is required to fill down to the license boundary. However, uncertainty exists regarding this trapping mechanism: the fault system is only marginally within 3D data coverage but shows potentially discontinuous fault system; uncertainty whether caprock (or fault barrier) can hold large hydrocarbon column; and uncertainty whether fetch area large enough to enable fill to spill.

In terms of reservoir presence, the Wheeljack seismic anomaly is located basinwards of a thicker seismic package that is more likely to represent well developed thicker fan system. Only on an uncalibrated loop does it continue into the license area.

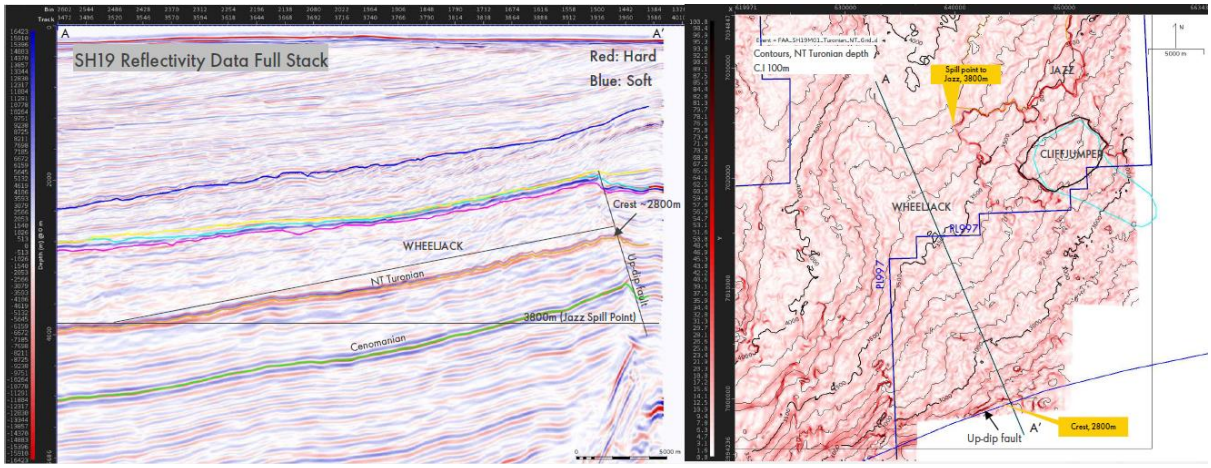


FIGURE 7 *Wheeljack observed on seismic (left figure, SH19M01 reflectivity data full stack) and map view (right figure, dip map of Near Top Turonian). Dark blue horizon: Balder, yellow horizon: Våle, cyan horizon: Springar, pink horizon: Nise, red horizon: Near Top Turonian shifted 8ms up for attribute extraction purposes, orange horizon: Near Top Turonian (target), green horizon: Cenomanian*

Cliffjumper Lead

Cliffjumper shows stronger anomalies along the northern edge, possible due to a combination of lithology and hydrocarbons. Gradual dimming to the south, no clear stratigraphic trapping component along this edge. High uncertainty whether the lead is one connected trap as several faults are observed cross cutting the anomaly.

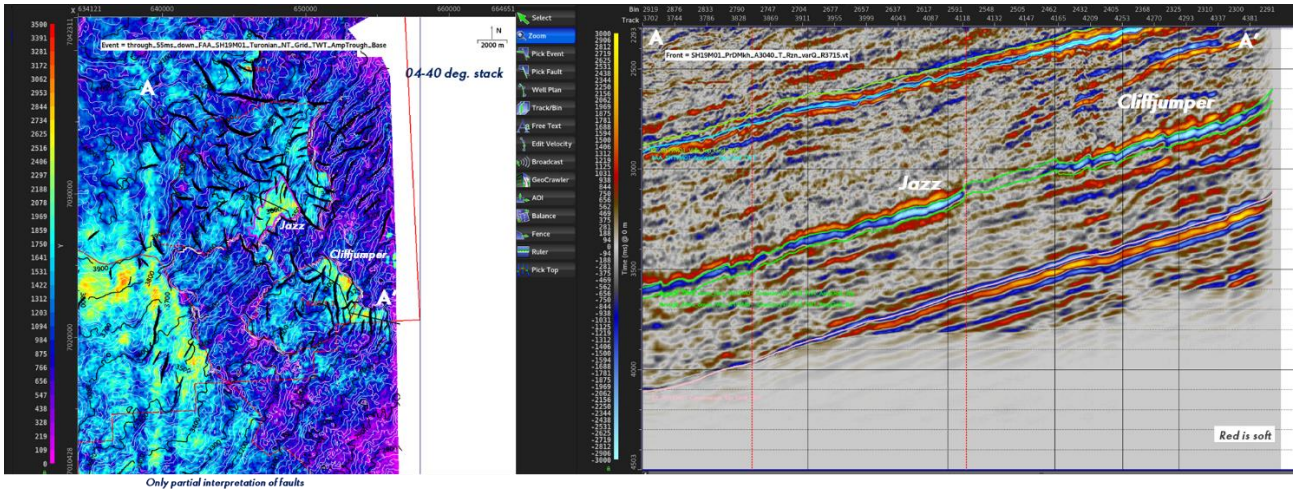


FIGURE 8 *Cliffjumper observed on seismic. (Left) Amplitude map of SH19M01 full stack reflectivity data, only partial interpretation of faults. Shows seismic line location through Jazz and Cliffjumper. (Right) seismic line through Jazz and Cliffjumper*

Phantom Lead

The Phantom lead was introduced to the license post-award from INEOS (now, PGNiG) as an amplitude anomaly located on top of the Gossa High. The lead is difficult to interpret, and high picking uncertainty exists. The lead is sealed by potential faults towards the south and southeast, which are also difficult to interpret at Turonian level, but similar trending faults were observed at Cenomanian and Danian. The lead also depends on a stratigraphic component towards the crestal area. Seismic anomaly within the Phantom lead is more pronounced at base interpretation, amplitude at top interpretation is brighter downdip. Slight thickening in the seismic is observed within the Phantom polygon, and interpretation of spectral decomposition images may suggest sediment transport route across the lead. Trap, reservoir presence and quality remain main risks.

Hval Lead

The Hval lead is characterized by lower seismic frequency and moderate amplitude anomaly on the slope from Slørebotn to Ormen Lange Dome. Conceptual turbidite fan of Maastrichtian age (Springar Fm) deposited on terrace between Slørebotn and Ormen Lange Dome.

Due to uncertainties regarding trap, seal, and reservoir; volume uncertainty is high due to poor definition of container, as the lead is a patchy seismic anomaly on 3D and partly 2D based.

3D intercept and gradient data do not reveal similar response to gas filled sands as observed at Ormen Lange field, and the partnership thus agreed to not continue with data acquisition and the lead was not further worked.

Kolle Lead

The Kolle lead is located in the fairway for sediment transport to the Ormen Lange field and is a 3-way dipping structure which requires a stratigraphic updip seal, targeting the Egga sands. Stratigraphic trapping was key risk.

After reprocessing of 3D seismic, seismic inversion shows no anomaly at the Kolle location and was thus not further worked.

Ormen Korte Lead

The Ormen Korte lead was originally amplitude anomaly at the Egga level, underneath the area of the seabed escarpment, and there was thus a risk of artefacts in the seismic data. The Ormen Korte lead requires a stratigraphic trapping element to work.

After reprocessing of 3D seismic, seismic inversion shows no anomaly at the Ormen Korte location and was thus not further worked.

4. TECHNICAL EVALUATIONS

New technical evaluations were carried out to evaluate the PL997 volume potential and the feasibility for economic development in the context of the wider Ormen Lange field activities. With the revised volumes and POS however, none of the PL997 opportunities are seen to be commercially attractive.

5. CONCLUSIONS

The evaluation of the license has concluded with the following view:

- The technical evaluation has not identified good indications for sufficiently large traps of hydrocarbons with well-developed Turonian sandstone reservoirs for the prospect and leads in PL997.
- The evaluation has led to reduced volume in the Jazz prospect. The original seismic anomaly is seen to comprise several small fault compartments. Jazz is now seen as one of the larger of these fault blacks with the most convincing characteristics for hydrocarbons. The new definition of the prospect is more robust and thus has a POS increase.
- Development concepts and economic estimates have been developed. Jazz was in the end the only robust prospect, but the volume potential is seen too small for a commercial project.

All work commitments for the license have been fulfilled, but a drill-worthy prospect has not been identified. Therefore, the partnership unanimously recommends the relinquishment of PL997.

6. APPENDIX

Table 5: Prospect data (Enclose map)

Block	6305/9 & 6306/7	Prospect name	Jazz	Discovery/Prosp/Lead	Lead	Prosp ID (or New!)	NPD will insert value	NPD approved (Y/N)	
Play name	NPD will insert value	New Play (Y/N)		Outside play (Y/N)					
Oil, Gas or O&G case:	Gas	Reported by company	Shell	Reference document	PL997 Relinquishment Document			Assessment year	2023
This is case no.:	1 of 1	Structural element	Rås Basin	Type of trap	Fault bounded-str	Water depth [m MSL] (>0)	270	Seismic database (2D/3D)	3D
Resources IN PLACE and RECOVERABLE		**Main phase**				**Associated phase**			
Volumes, this case		Low (P90)	Base, Mode	Base, Mean	High (P10)	Low (P90)	Base, Mode	Base, Mean	High (P10)
In place resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	0,49		2,31	4,64	0,14		0,69	1,42
Recoverable resources	Oil [10^6 Sm^3] (>0.00)								
	Gas [10^9 Sm^3] (>0.00)	0,32		1,50	3,02	0,09		0,45	0,93
Reservoir Chrono (from)	Turonian	Reservoir litho (from)	Lysing Fm	Source Rock, chrono primary	Upper Jurassic	Source Rock, litho primary	Spekk Fm	Seal, Chrono	Coniacian
Reservoir Chrono (to)		Reservoir litho (to)		Source Rock, chrono secondary		Source Rock, litho secondary		Seal, Litho	Kvitnos Fm
Probability [fraction]									
Total (oil + gas + oil & gas case) (0.00-1.00)	0,36	Oil case (0.00-1.00)	0,00	Gas case (0.00-1.00)	1,00	Oil & Gas case (0.00-1.00)	0,00		
Reservoir (P1) (0.00-1.00)	0,65	Trap (P2) (0.00-1.00)	0,65	Charge (P3) (0.00-1.00)	0,90	Retention (P4) (0.00-1.00)	0,35		

Parametres:	Low (P90)	Base	High (P10)
Depth to top of prospect [m MSL] (> 0)		3490	
Area of closure [km^2] (> 0.0)		6,7	7,2
Reservoir thickness [m] (> 0)	31	45	64
HC column in prospect [m] (> 0)	80	150	160
Gross rock vol. [10^9 m^3] (> 0.000)	0,575	0,950	1,515
Net / Gross [fraction] (0.00-1.00)	0,20	0,30	0,60
Porosity [fraction] (0.00-1.00)	0,13	0,20	0,24
Permeability [mD] (> 0.0)	10,0	50,0	200,0
Water Saturation [fraction] (0.00-1.00)	0,53	0,43	0,36
Bg [Rm3/Sm3] (< 1.0000)	0,0031	0,0033	0,0037
1/Bo [Sm3/Rm3] (< 1.00)			
GOR, free gas [Sm^3/Sm^3] (> 0)	7200	14800	27000
GOR, oil [Sm^3/Sm^3] (> 0)			
Recov. factor, oil main phase [fraction] (0.00-1.00)			
Recov. factor, gas ass. phase [fraction] (0.00-1.00)	0,55	0,65	0,75
Recov. factor, gas main phase [fraction] (0.00-1.00)	0,55	0,65	0,75
Recov. factor, liquid ass. phase [fraction] (0.00-1.00)			
Temperature, top res [°C] (>0)	123		
Pressure, top res [bar] (>0)	500		
Cut off criteria for N/G calculation	Vsh<0.5		

Comments

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

7. REFERENCES

APA 2018 Application, Blocks 6305/5, 6, 8, 9, 11 & 12, 6306/7

PL996 License Status Report (2021)