PL1202 S
Relinquishment report

Licence Status report

Table of contents

1 Licence history 5
2 Database overview 7
2.1 Seismic database 8
2.2 Well data 9
3 Result of geological and geophysical studies 10
4 Prospect update report 12
5 Technical evaluation 12
6 Conclusion 12

List of Figures

Figure 1.1 Area map showing license outline, Zulu discovery and Orvar-Odd prospect 6
Figure 2.1 Seismic database and key wells 7
Figure 2.2 CSEM survey EMG24250 (NS2401) in blue outline 8
Figure 3.1 Depth reservoir map of Orvar-Odd prospect 10
Figure 3.2 Seismic cross section in depth showing the Orvar-Odd prospect and Zulu discovery, well 26/10-1 11
Figure 3.3 Attribute extraction at Orvar-Odd interval from CSEM vertical resistivity showing no resistivity response 11

List of Tables

Table 2.1 Seismic database used for APA application 8
Table 2.2 List of seismic surveys in the licence common database 9
Table 2.3 Well database 9
Table 4.1 Recoverable resources for Orvar-Odd prospect and Zulu discovery for the APA application 12
Table 4.2 In place resources for Orvar-Odd post CSEM evaluation 12

1 Licence history

Licence: PL1202 S (Figure 1.1)

Awarded: 15.03.2024

Licence period: Expires 15.03.2032

Licence group:

Equinor Energy AS	50%
AkerBP ASA	30%
Petoro AS	20%

Licence area: 2715km^2

Work program:
Study of geology and geophysics
Acquire new EM survey
Decision to acquire existing 3D seismic, 15.03.2025

Meetings held:

13.05.2024	ECMC meeting no 1
28.05.2024	EC Work meeting
19.11.2024	ECMC meeting no 2

Work performed

2024:
CSEM survey acquisition
Licence start-up
Interpretation of the CSEM survey together with geological/geophysical evaluation
Decision made to surrender licence

Reason for surrender:

CSEM EMG24250 (NS2401) was acquired and evaluated. No resistivity anomaly is observed on the CSEM data for the main prospect, which indicates no high gas saturation in the prospect. Since this was the criteria to go forward, the partnership decided unanimously to drop PL1202 S as no viable drilling candidate has been identified.

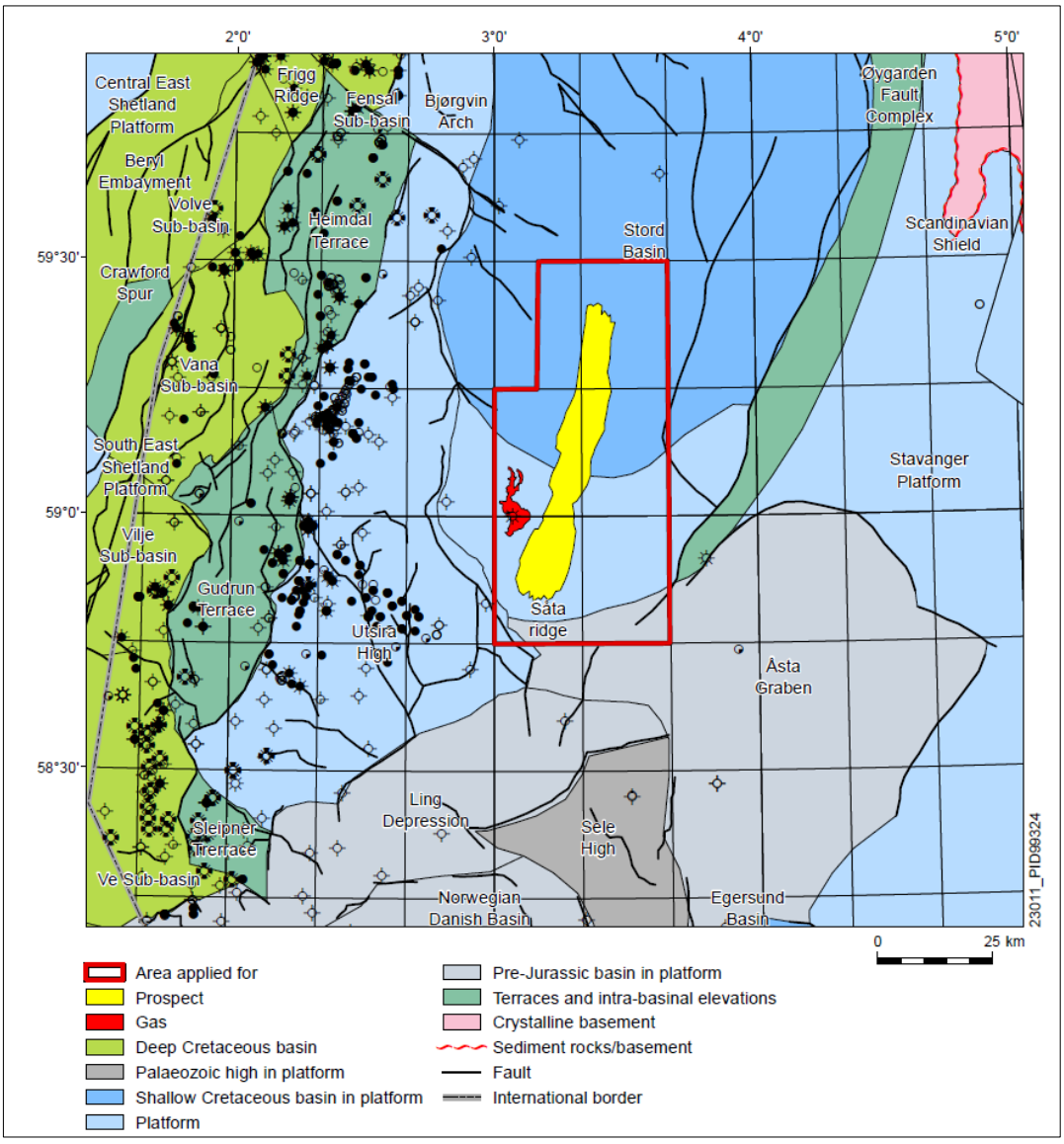

Figure 1.1 Area map showing license outline, Zulu discovery and Orvar-Odd prospect

2 Database overview

Figures 2.1 and 2.2 illustrate the key wells and the extent of seismic data used for prospect maturation.

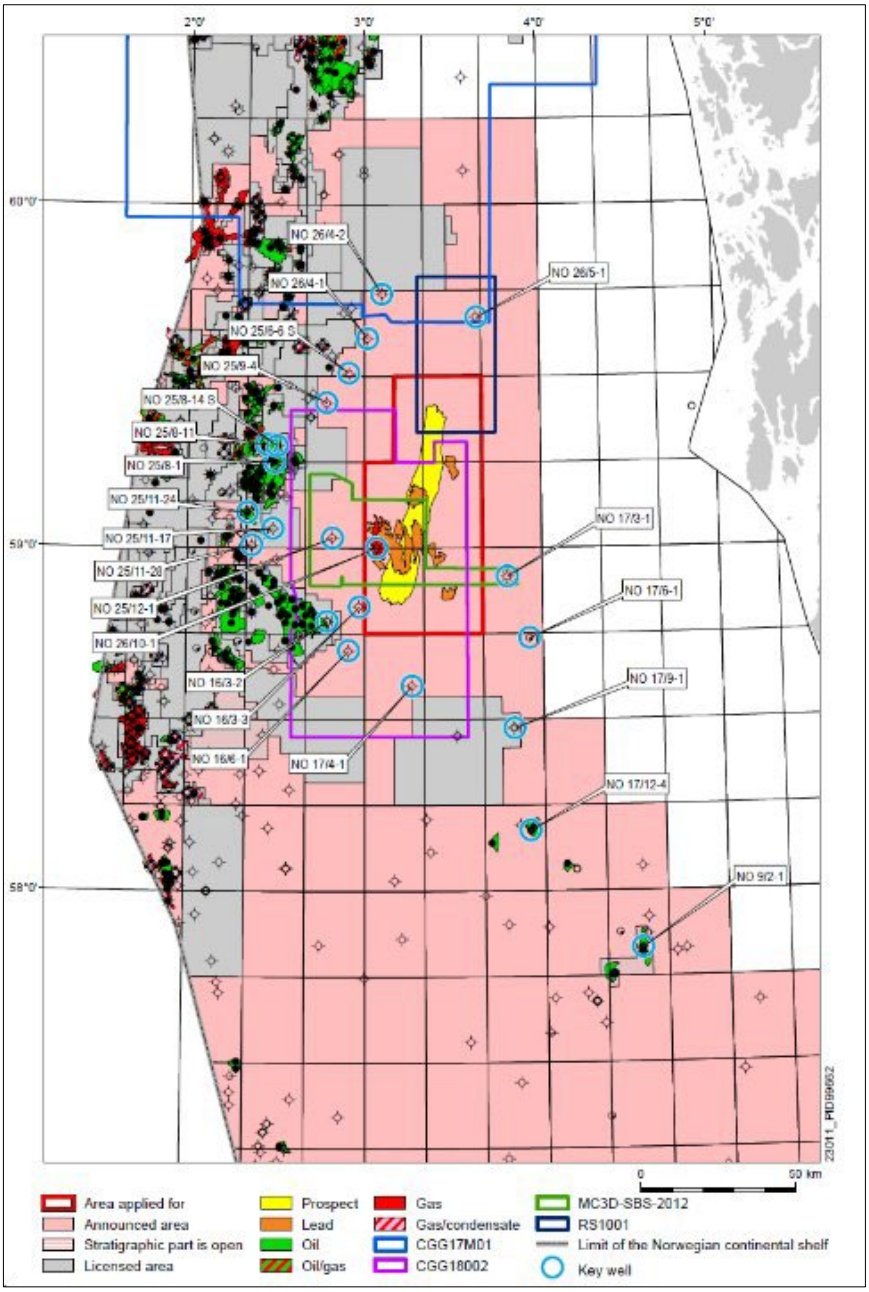

Figure 2.1 Seismic database and key wells. CSEM survey is shown in Figure 2.2.

Figure 2.2 CSEM survey EMG24250 (NS2401) in blue outline. License PL1202 S shaded.

2.1 Seismic database

Seismic datasets used in the evaluation of blocks 17/1, 17/2, 26/7, 26/8, 26/10 and 26/11 are shown in Figure 2.1 and 2.2. The seismic surveys in the common database of the license are listed in Table 2.2. CSEM survey, EMG24250 (NS2401) was acquired as part of the work programme for the license.

Seismic survey	2D/3D	Year	NPDID
CGG18002-NVG-SOUTH-PSDM	3D	2018	8618
MC3D-SBS-2012merge	3D	2012	
RS1OO1	3D	2010	7186
CGG17MO1 (from CGG14003)	3D	2014-2015	7984

Table 2.1 Seismic database used for APA application

Seismic Survey	2D/3D	Year	NPDID
MC3D-SBS-2012merge	3D	2012	
RS1OO1 PSTM		2010	7186
EMG24250 (NS2401)	CSEM	2024	10732

Table 2.2 List of seismic surveys in the licence common database

2.2 Well data

Table 2.3 lists the wells part of the common database and used for prospect evaluation.

Well	Completed date	Drilling operator	Production licence	Content	Age at TD	Fm. at TD	NPDID wellbore
9/2-1	1987-04-28	Den norske stats oljeselskap AS	114	OIL	LATE TRIASSIC	SKAGERRAK FM	1038
16/3-2	1976-03-08	Norsk Hydro Produksjon AS	007	DRY	PRE-DEVONIAN	BASEMENT	334
16/3-3	1989-08-06	Esso Exploration and Production Norway A/S	149	DRY	LATE CRETACEOUS	TOR FM	1415
16/6-1	1968-01-19	Elf Petroleum Norge AS	007	DRY	PRE-DEVONIAN	BASEMENT	148
17/3-1	1995-08-20	Elf Petroleum Norge AS	188	GAS	PRE-DEVONIAN	BASEMENT	2576
17/4-1	1968-08-26	Elf Petroleum Norge AS	007	DRY	EARLY PERMIAN	ROTLIEGEND GP	153
17/6-1	2011-02-07	Norwegian Energy Company ASA	545	OIL SHOWS	LATE TRIASSIC	SKAGERRAK FM	6501
17/9-1	1973-10-23	Esso Exploration and Production Norway A/S	002	DRY	MIDDLE JURASSIC	VESTLAND GP	337
17/12-4	2009-07-10	BG Norge AS	407	OIL	TRIASSIC	SKAGERRAK FM	6137
25/6-6 S	2019-04-22	Equinor Energy AS	870	DRY	TRIASSIC	HEGRE GP	8688
25/8-1	1970-07-04	Esso Exploration and Production Norway A/S	027	OIL	EARLY PERMIAN	ROTLIEGEND GP	173
25/8-11	1997-12-02	Esso Exploration and Production Norway A/S	027	OIL	EARLY JURASSIC	STATFJORD GP	3209
25/8-14 S	2003-09-22	Esso Exploration and Production Norway A/S	027	OIL	EARLY JURASSIC	STATFJORD GP	4805
25/9-4	2014-02-27	Statoil Petroleum AS	628	DRY	MIDDLE JURASSIC	SLEIPNER FM	7299
25/11-17	1993-03-22	Norsk Hydro Produksjon AS	169	DRY	PRE-DEVONIAN	BASEMENT	1921
25/11-24	2007-03-29	Norsk Hydro Petroleum AS	169	OIL	EARLY JURASSIC	STATFJORD GP	5470
25/11-28	2015-09-25	Statoil Petroleum AS	169	DRY		BASEMENT	7776
25/12-1	1973-12-23	A/S Norske Shell	010	DRY	DEVONIAN	NO GROUP DEFINED	374
26/4-1	1987-07-17	BP Norway Limited U.A.	118	DRY	TRIASSIC	NO GROUP DEFINED	1046
26/4-2	2004-04-26	A/S Norske Shell	266	DRY	LATE CRETACEOUS	TOR FM	4925
26/5-1	2013-05-06	Rocksource Exploration Norway AS	506 S	DRY	LATE CRETACEOUS	TRYGGVASON FM	7142
26/10-1	2015-02-13 0	Lundin Norway AS	674 BS	GAS		HORDALAND GP	7609

Table 2.3 Well database

3 Result of geological and geophysical studies

Figure 3.1 shows a Top reservoir depth map of the Orvar-Odd prospect, which is a stratigraphic prospect with a pinch-out in the southern, northern, and eastern direction. A seismic line through the Orvar-Odd prospect and the Zule discovery, well 26/10-1 is shown in Figure 3.2.

The following work has been performed for PL1202 S:

- CSEM acquisition feasibility/planning
- Acquisition of CSEM survey EMG24250 (NS2401)
- CSEM inversion & scenario testing
- Evaluating CSEM results & integration with seismic and Zulu discovery

According to CSEM sensitivity, the EM would detect as thin as 5m clean, gas filled sands with gas saturation > 0.5, and even thinner sands if higher saturation. No resistivity anomaly was observed on the CSEM data for the main and only prospect Orvar-Odd, which indicates no high gas saturation in the prospect (Figure 3.3).

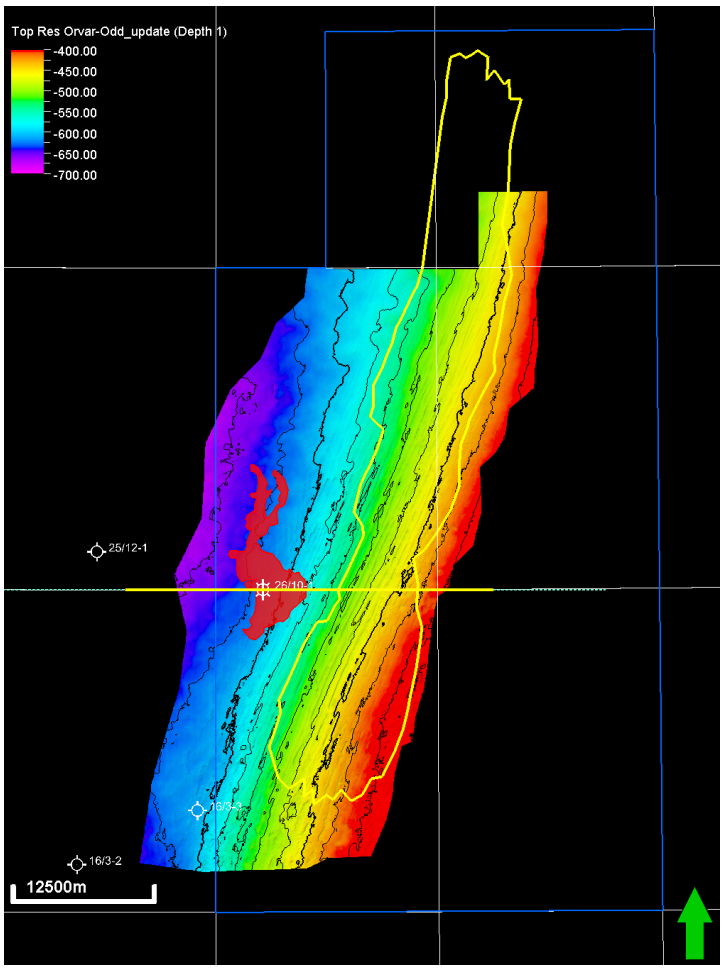

Figure 3.1 Depth reservoir map of Orvar-Odd prospect. Orvar-Odd outline indicated in yellow, location of the Zulu discovery in red, and outline of PL1202 S shown in blue. Indicated also position of the seismic line in Figure 3.2

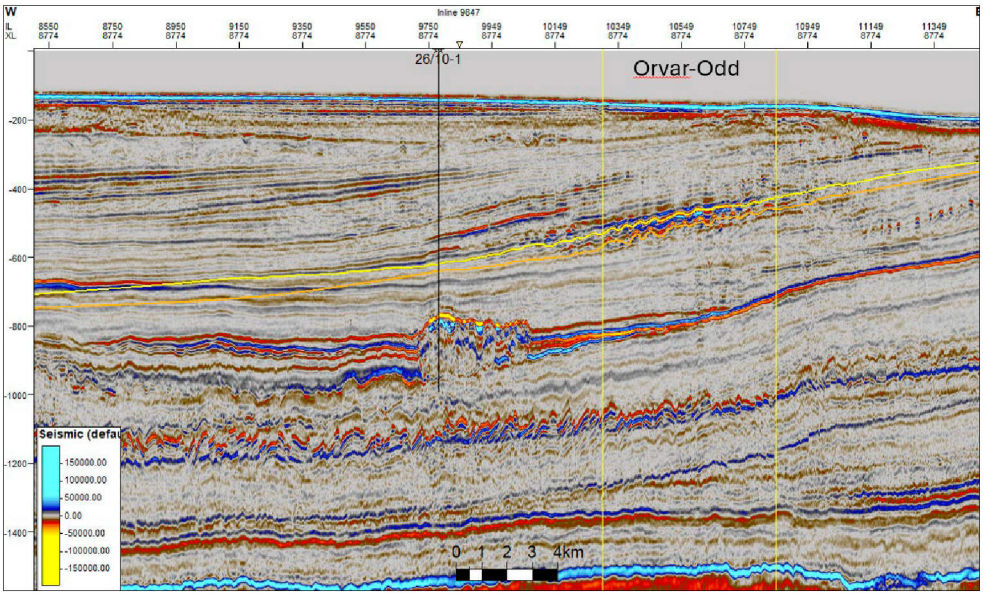

Figure 3.2 Seismic cross section in depth showing the Orvar-Odd prospect and Zulu discovery, well 26/10-1 (for location of the line, see Figure 3.1). Also shown is top and base reservoir for Orvar-Odd.

4 Prospect update report

Based on the results from the CSEM evaluation, the prospect Orvar-Odd is downgraded by reducing the volumes, and increasing the risk for trap seal considerably, as the prospect is interpreted to most likely have leaked.

No recoverable volumes have been calculated post CSEM. Volumes and Pg from the APA application are shown in Table 4.1, and in place volumes and new Pg post-CSEM in Table 4.2.

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)						
Orvar-Odd	P	Gas	0.01	0.02	0.05	7.24	24.55	48.17	0.31	100.0	Naust Fm/Pleistocene	400	Johan Sverdrup	40
Zulu	D	Gas		0.01	0.01	2.74	5.11	7.79	1.00	100.0	Utsira Fm/Miocene	770	Johan Sverdrup	35

Table 4.1 Recoverable resources for Orvar-Odd prospect and Zulu discovery for the APA application.

Prospect	Age	Formation	In-place res. (MSm3 o.e.) Total resources			Pg %
			P90	Mean	P10	
Orvar-Odd	Pleistocene	Naust	6	11	34	5

Table 4.2 In place resources for Orvar-Odd post CSEM evaluation.

5 Technical evaluation

As no resistivity anomaly is observed on the CSEM data for the main and only prospect, Orvar-Odd (Figure 1.1 & 3.1), indicating no high gas saturation in the prospect, Orvar-Odd has been downgraded. No viable drilling candidate has been identified.

6 Conclusion

CSEM EMG24250 (NS2401) was acquired and evaluated. No resistivity anomaly is observed on the CSEM data for the main prospect, which indicates no high gas saturation in the prospect. Since this was the criteria to go forward, the partnership has decided unanimously to drop PL1202 S as no viable drilling candidate has been identified.