

## **PL630CS License status report**

**2025-024171**

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## 1 History of the production license

PL630CS was located west and north of the Toppand discovery in PL630 (Fig.1-1). The PL630CS was awarded as an additional acreage to PL630 and stratigraphically limited to the strata below the Base Cretaceous Unconformity. The licence was awarded 17.02.2023 and was dropped 17.02.2025. The operator has been Equinor Energy AS, with partner Wellesley Petroleum AS. (See license information in Table 1-1).

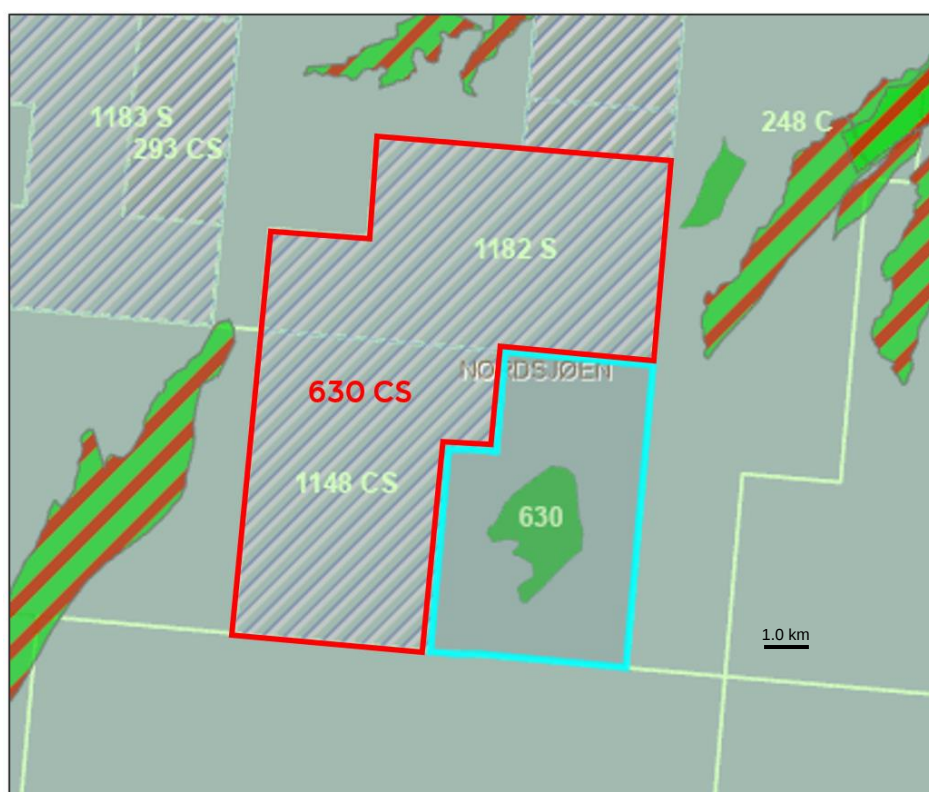


Figure 1-1 PL630 CS and PL630 licence overview.

Table 1-1 Licence information

| PL090F                             |  |
|------------------------------------|--|
| Location                           | North Sea  |
| Awarded                            | 17.02.2023   |
| Drill or drop                      | 17.02.2025   |
| (BoK) Beslutning om konkretisering | 17.08.2025   |
| License period                     | 16.02.2025   |
| License group                      | Equinor Energy AS (95%) (Operator), Wellesley Petroleum AS (5%). |
| License area                       | 45 km <sup>2</sup>   |

### Work obligations:

Work program in the license is listed in Table 1-2 All work obligations have been fulfilled.

**Table 1-2 Work Program PL 630 CS**

| Arbeidsprogram                 | Beslutning                                 | Oppgave status  | Oppgave frist | Brønnbane hvis boret |
|--------------------------------|--|-----------------|---------------|----------------------|
| Geologi- og geofysikkstudier   |  | Godkjent        |               |                      |
|                                | Beslutning om boring                       | Skal ikke bores | 17.02.2025    |                      |
| Boring av letebrønn            |  | Skal ikke bores |               |                      |
|                                | (BoK) Beslutning om konkretisering         | Frafalt         | 17.08.2025    |                      |
| Konseptstudier                 |  | Frafalt         |               |                      |
|                                | (BoV) Beslutning om videreføring           | Frafalt         | 17.02.2026    |                      |
| (PUD) Utarbeide utbyggingsplan |  | Frafalt         |               |                      |
|                                | (PUD) Innlevering av utbyggingsplan        | Frafalt         | 17.02.2027    |                      |
|                                | Beslutte overgang til forlengelsesperioden | Frafalt         | 17.02.2027    |                      |

### Meetings held:

**Table 1-3 Meetings held**

| Date       | Meeting |
|------------|---------|
| 22.03.2023 | EC-MC   |
| 13.12.2024 | EC-MC   |

### Reason for surrender:

Mapping with the new Dual Azimuth seismic CGG24M01 has increased the definition and understanding of the main prospect in the license (Toppand West). Studies have concluded that both the trap risk and migration risk are very high regarding the Toppand West downfaulted trap. The licence partners do not see enough value in the prospect to continue with a drill decision in 2025.

## **2 Database overview**

### 2.1. Seismic database

The seismic mapping in the license area applied for in the APA 2022 was predominantly done using the



36 wells are included into the well database (Table 2-2). The key wells for the evaluation of the Toppand West prospect are the nearby 35/10-7S and 35/10-7A wells (Toppand discovery), and the Røver Nord discovery wells (31/1-2S and 31/1-2A).

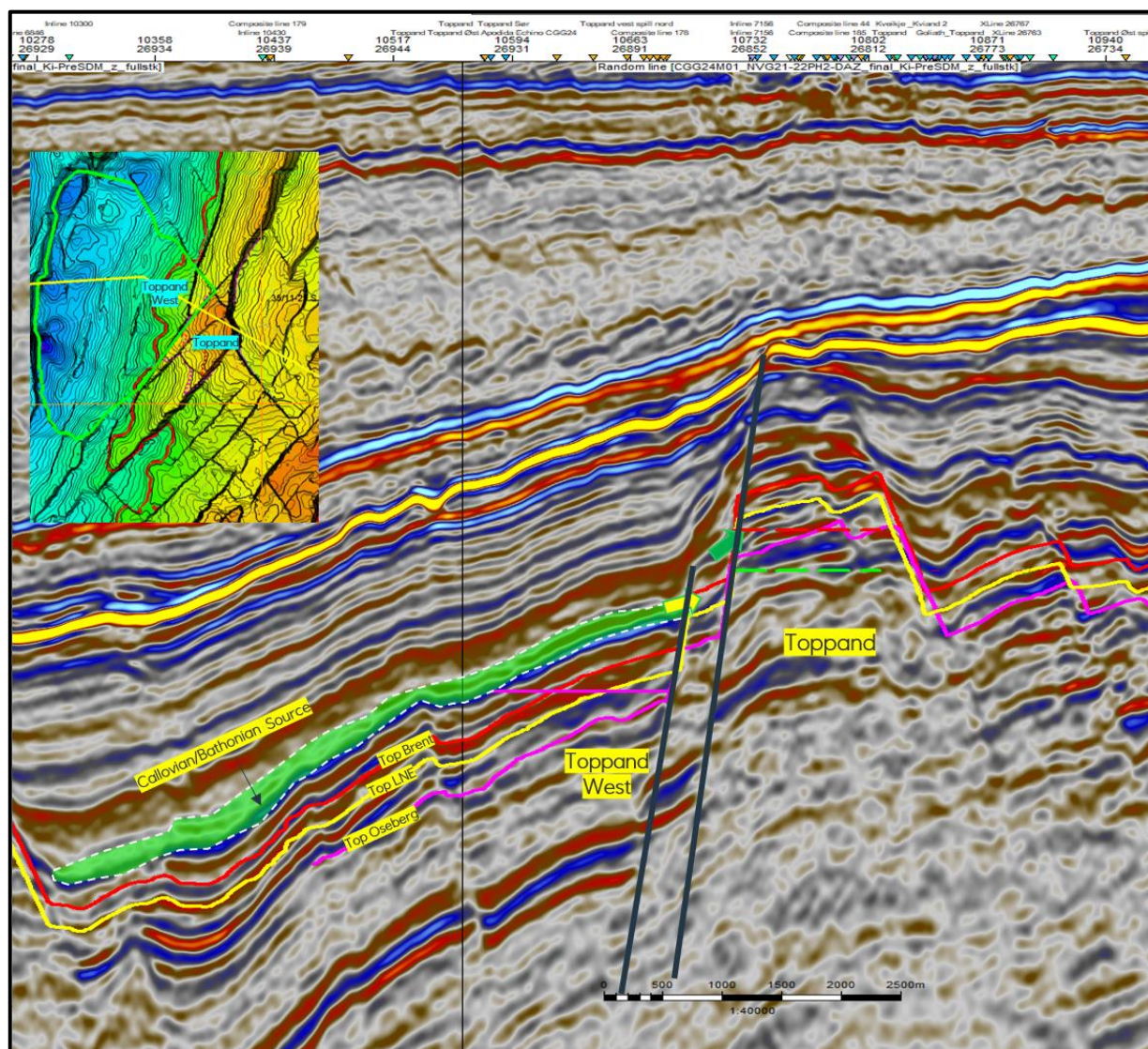
**Table 2-2** Wellbore database

| Well            | Completion Year | Purpose   | Content     | Status | Well          | Completion Year | Purpose     | Content    | Status |
|-----------------|-----------------|-----------|-------------|--------|---------------|-----------------|-------------|------------|--------|
| 30/3-2, R       | 1981            | Wildcat   | Oil/Gas     | P&A    | 35/11-20 A    | 2016            | Appraisal   | Oil        | P&A    |
| 31/1-1          | 2008            | Wildcat   | Dry         | P&A    | 35/11-23      | 2019            | Wildcat     | Oil/Gas    | P&A    |
| 31/1-2S         | 2021            | Wildcat   | Oil/Gas     | P&A    | 35/11-23 A    | 2019            | Wildcat     | Dry        | P&A    |
| 31/1-2A         | 2021            | Appraisal | Oil         | P&A    | 35/11-3 S     | 1989            | Wildcat     | Oil Shows  | P&A    |
| 34/12-1         | 2008            | Wildcat   | Gas/Condens | P&A    | 35/11-5, - T2 | 1991            | Wildcat     | Oil/Gas    | P&A    |
| 35/10-1, -T2    | 1992            | Wildcat   | Gas         | P&A    | 35/11-6       | 1992            | Appraisal   | Oil Shows  | P&A    |
| 35/10-2, -T2    | 1996            | Wildcat   | Oil         | P&A    | 35/11-8 S     | 1996            | Wildcat     | Oil/Gas    | P&A    |
| 35/10-3         | 1999            | Wildcat   | Dry         | P&A    | 35/11-9       | 1997            | Wildcat     | Oil        | P&A    |
| 35/10-7S        | 2021            | Wildcat   | Oil         | P&A    | 35/11-R-11 H  | 2020            | Observation | N/A        | P&A    |
| 35/10-7A        | 2021            | Appraisal | Oil/Gas     | P&A    | 31/1-3 S      | 2023            | Wildcat     | Oil/Gas    | P&A    |
| 35/11-12        | 2000            | Wildcat   | Oil Shows   | P&A    | 31/2-19 S     | 1996            | Wildcat     | Oil Shows  | P&A    |
| 35/11-13        | 2005            | Wildcat   | Oil Shows   | P&A    | 21/2-21       | 2014            | Wildcat     | Dry        | P&A    |
| 35/11-14 S      | 2006            | Appraisal | Oil/Gas     | P&A    | 31/2-8        | 1982            | Wildcat     | Oil Shows  | P&A    |
| 35/11-15 S, -T2 | 2007            | Wildcat   | Oil/Gas     | P&A    | 35/11-25 S    | 2021            | Wildcat     | Dry        | P&A    |
| 35/11-18        | 2015            | Wildcat   | Oil         | P&A    | 35/11-25 A    | 2021            | Wildcat     | Oil Shows  | P&A    |
| 35/11-18 A      | 2015            | Appraisal | Oil/Gas     | P&A    | 35/10-10 S    | 2023            | Wildcat     | Oil/Gas    | P&A    |
| 35/11-2         | 1987            | Wildcat   | Gas/Condens | P&A    | 35/10-10 A    | 2023            | Appraisal   | Gas/Conder | P&A    |
| 35/11-20 S      | 2016            | Wildcat   | Oil         | P&A    | 35/11-22 S    | 2019            | Wildcat     | Oil        | P&A    |

### 3 Results of geological and geophysical studies

In the APA 2022 application, the trap risk of the main prospect, Toppand West, was deemed to have the highest risk. The main task has therefore been to evaluate the trapping configuration and update the trap risk with fault seal analysis. This analysis resulted in an increased trap risk compared to the APA application. Basin modelling study demonstrates that the Toppand West prospect in general is located within a large drainage area. However, no direct juxtaposition to the Toppand West prospect is present. Toppand West most likely must be sourced from the lowermost part of Heather Formation (Fair-Good), and downwards into the Brent Group reservoirs. The perfect juxtaposition, as seen on the Toppand structure, with proved migration into the Toppand discovery, prevents pressure buildup in the source needed for downward migration into Toppand West (Figure 3-1).



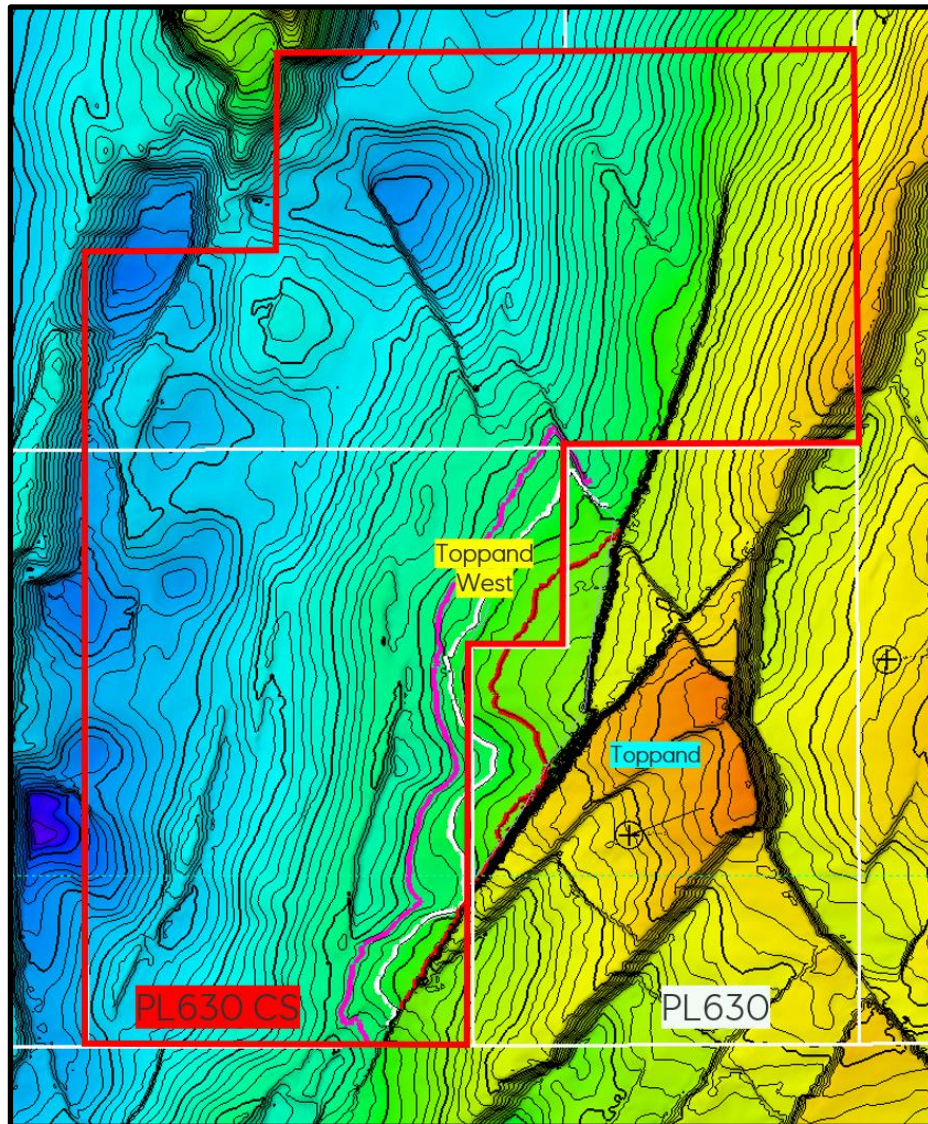


**Figure 3-1 Toppand West prospect and location of source rock. Index map = Top Brent depth. Green polygon = HC drainage area. Red polygon = Mean OWC. No direct juxtaposition to the Toppand West prospect is present. Toppand West most likely must be sourced from the lowermost part of Heather Formation (Fair-Good), and downwards into the Brent Group reservoirs.**

#### 4 Prospect update report

The Toppand West prospect is a fault bounded 3-way closure located west of the Toppand discovery (Figure 4-1). The reservoirs are the same as in the Toppand discovery; Ness, Etive and Oseberg formations as the main reservoirs.

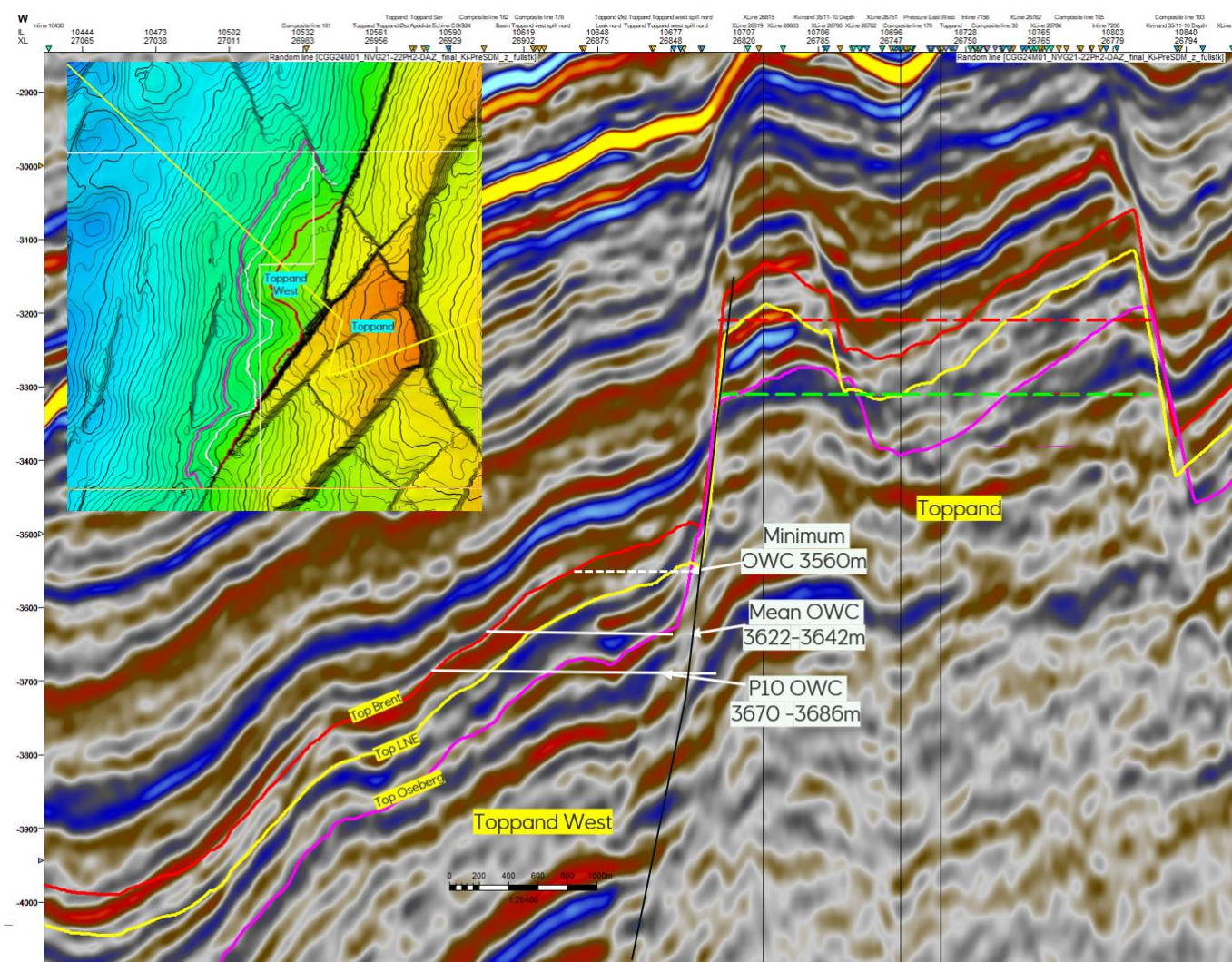




**Figure 4-1 Location of Toppand West prospect (Top Brent depth). Red contour = Minimum OWC. White contour = Mean OWC. Magenta contour = P10 OWC.**

The reservoirs in Toppand West are buried about 3- 400m deeper than the Toppand discovery and a significant reduction of the average porosities compared to the Toppand discovery is expected. The fault throw between Toppand discovery and Toppand West prospect varies between 130 to 300m (Figure 4-2), and the Brent Group reservoirs in Toppand West are juxtaposed to the water bearing Dunlin Group sandstones and shales in the Toppand discovery.





**Figure 4-2 Toppand West prospect with the prognosed contact distributions. Red contour = Minimum OWC. White contour = Mean OWC. Magenta contour = P10 OWC.**

Although both oil and gas were encountered in the Toppand discovery, only oil is expected in the Toppand West prospect due to higher expected pressure compared to the Toppand discovery.

Reservoir is not regarded as a risk in the Toppand West prospect although the expected Brent Group reservoirs are significantly poorer than observed on the Toppand wells. Average porosities are expected to be reduced from about 18-19% in the Toppand discovery to about 14-15% in the Toppand West, due to increased burial and quartz cementation.

Trap risk is regarded as the highest risk (Pg Trap = 0.4) due to the dependency on fault sealing.

Source presence is no risk, as the Callovian/Bathonian fair-good source rock is mature and present in a large drainage area close to the prospect (Figure 3-1). However, charging the prospect is dependent on downward migration and resulting high risk (Pg Migration = 0.5).

Table 4-1 gives a summary of the risk factors, and Table 4-2 the overview of the updated volume potential, Toppand West.

About 30% of the Toppand West prospect volumes is within the dropped license PL630 CS, and 70 % of the volumes is within the PL 630 license.

In the APA application an additional high-risk prospect was presented (Magpie). The Magpie prospect was defined as a combined structural/stratigraphic trap with Tarber Formation reservoir. Maturation of this prospect has concluded that the Tarbert Formation reservoir is not present in the area, and the prospect is removed from the prospect inventory.

**Table 4-1 Overview of the risk factors, Toppand West**

| Risk factor                 | P(play) | P(segment   pl...) |
|-----------------------------|---------|--------------------|
| Trap Geometry               |         | 1.000              |
| Trap Seal                   | 1.000   | 0.400              |
| Reservoir Presence          | 1.000   | 1.000              |
| Producibility               |         | 1.000              |
| Source Presence             | 1.000   | 1.000              |
| Source Migration            |         | 0.500              |
| HC-Phase Success            |         | 1.000              |
| > Marginal play probability | 1.000   |                    |
| > Conditional segment pr... |         | 0.200              |

**Table 4-2 Overview of the volumes in Toppand West**

|         | Prospect segments | In-place, total resources (MSm3), 100% |      |     | Recoverable, total resources (MSm3), 100% |      |     | Pg % | Within PL 630CS % |
|---------|-------------------|--|------|-----|---|------|-----|------|-------------------|
|         |                   | P90                                    | Mean | P10 | P90                                       | Mean | P10 |      |                   |
| Segment | Toppand West      | 0.8                                    | 2.7  | 5.0 | 0.2                                       | 0.6  | 1.1 | 20   | 30                |

## 5 Technical evaluation

No valuation has been carried out on the Toppand West prospect given the low expected volumes and high risk.

## 6 Conclusion

The potential HC volumes are relatively small with comparatively low chance of success. Partners in PL630 CS do not see enough value in the Toppand West prospect to continue with a drill decision in 2025, and the license is consequently dropped.