ASX Announcement

2 July 2025

PANCONTINENTAL ENERGY NL

PEL 87 TECHNICAL UPDATE

Pancontinental Energy NL (**ASX: PCL**) ("**Pancontinental**" or "**Company**) is pleased to provide the following technical update in relation to its PEL 87 project, Orange Basin, offshore Namibia.

Highlights

- Pancontinental's Quantitative Interpretation (QI) specialist has analysed PEL 87 3D seismic data, incorporating rock physics trends from regional well data
- QI study provides support for a high net to gross reservoir system, with hydrocarbon fluid effects in evidence coincident with identified Class II AVO anomalies
- Basin Modelling study confirms that the world class Kudu source rock is ubiquitous across the PEL 87 permit area, with a mature kitchen generating low GOR oil directly beneath and to the northeast of the Saturn Complex
- Modelling indicates generative capacity exceeding 20 billion barrels feeding directly into the Saturn Complex
- Results to be incorporated into Pancontinental's estimates of prospective resources and geological risking

Basin Modelling

Pancontinental's basin modelling study has now been completed with input from a specialist consultant. The purpose of the study has been to analyse the formation and structural evolution of the Orange Basin within the vicinity of PEL 87 and reconstruct the geological/thermal history to predict areas of hydrocarbon generation, migration, and accumulation. In addition to the PEL 87 3D seismic volume, regional 2D seismic data was incorporated to provide coverage across the greater PEL 87 area. A number of regional wells were also included.

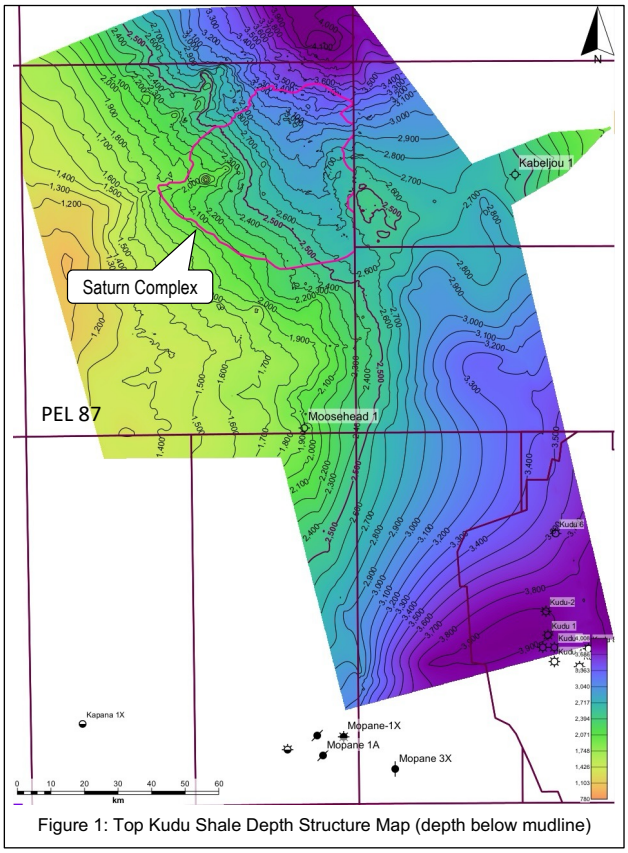

Figure 1: Top Kudu Shale Depth Structure Map (depth below mudline)

While a variety of potential source rocks have been identified in the Namibian offshore, it is the ubiquitous Barremian-Aptian aged Kudu Shale formation that is widely recognised as the primary source of hydrocarbons for the major light oil discoveries to the south of PEL 87. The Kudu formation has been proven within PEL 87 at the Moosehead-1X exploration well, which encountered approximately 200 metres of dominantly Type II marine oil shale with Total Organic Content (TOC) of up to 5.5%. The formation has a distinctive seismic character and is readily mapped across the entire PEL 87 area, with thickness generally between 200 to 300 metres. Figure 1 shows a depth structure map for the top Kudu Shale, with major depocentres evident beneath and to the northeast of the Saturn Complex, and to the southwest of PEL 87 in the vicinity of the Kudu

Gas Field and the Mopane oil discoveries

While the Kudu Shale was found to be early-mature for oil generation at the structurally high Moosehead-1X location, based on the regional mapping, and a mid-range geothermal gradient of 35°C per km, an oil kitchen exists directly beneath the Saturn Complex and extends eastwards and southwards to the Mopane discoveries. At greater depths of burial two discrete gas kitchens are identified, the larger of which sits directly beneath the Kudu Gas Field. The proximity of the Saturn Complex targets to the underlying oil kitchen places the Saturn exploration targets in an excellent position to receive hydrocarbon charge, with limited vertical and relatively short-distance lateral migration required. The mature area directly beneath the Saturn Complex is estimated to have generated and expelled approximately 20 Billion barrels of oil; sufficient to charge the full Saturn prospect/lead inventory up to the high case. A significant additional charge contribution can be expected from the "fetch" area that is situated down-dip to the northeast.

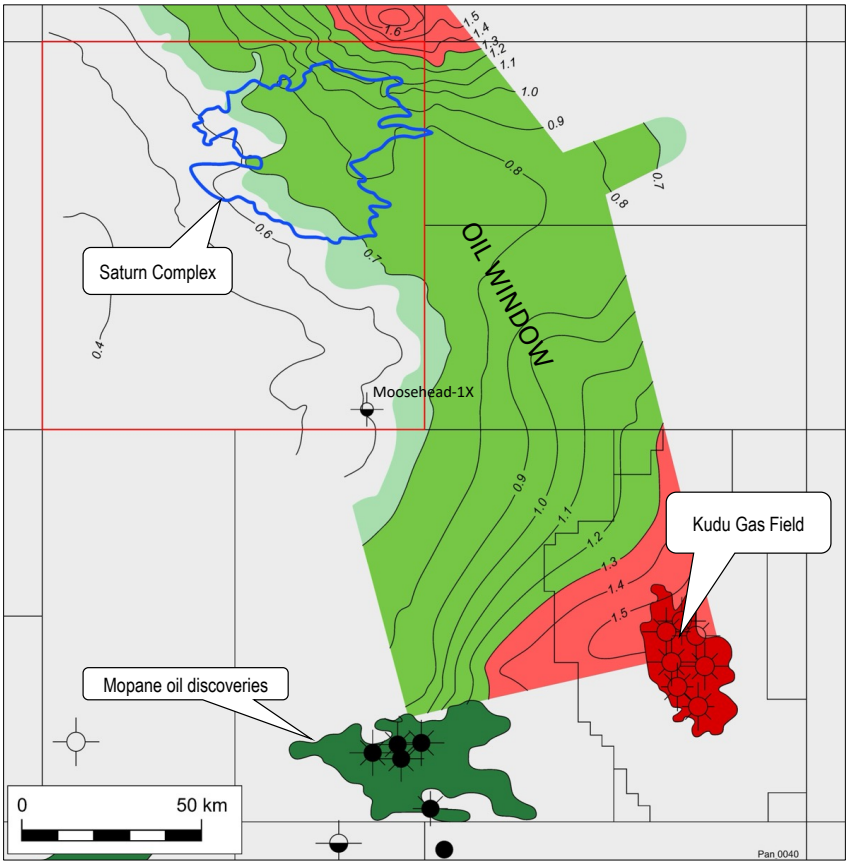

Figure 2: Kudu Shale Maturity Map

The gas kitchen situated to the northeast of the Saturn Complex is likely to contribute gas to the petroleum system. However, with an estimated Gas-Oil-Ratio (GOR) of 200 scf/Bbl the associated gas content within the Saturn Complex prospects/leads is predicted to be significantly lower than at (for example) TotalEnergies Venus discovery, in which the high level of associated gas presents certain challenges to development.

Quantitative Interpretation (QI)

Pancontinental has engaged an expert QI specialist to examine the AVO anomalies observed within the PEL 87 3D seismic data, and to investigate the rock physics from available regional well data to generate seismic AVO inversion data. Thus far the study has improved on previous efforts in that an analogue well for the interpreted Albian-aged reservoirs has been incorporated into the analysis, providing support for a high net-to-gross reservoir system coincident with AVO anomalies observed within the Saturn Complex. Analysis of the 3D seismic gathers indicates consistent Class II AVO responses in both upper and lower sequences within the Saturn Complex target intervals, and synthetic modelling of those intervals indicates possible hydrocarbon effects evident in the seismic data. Seismic Inversion products are still being screened, however Lambda-Rho volume outputs (which are sensitive to the presence of hydrocarbons and porosity) provide additional encouragement for the main prospective intervals identified.

In addition, the PaleoScan high frequency time-equivalent horizons from the sequence stratigraphic study have been used in amplitude extractions from the AVO inversion data. Channel forms are clearly present within the structurally enhanced area of the Oryx Prospect, providing direct support for the interpretation that Oryx is positioned within the axis of deposition for the Saturn Complex turbidite deposits. In summary this new evidence provides increased confidence for the presence of a high net-to-gross reservoir system within the Saturn Complex, and for the presence of hydrocarbons.

Pancontinental Energy Chief Executive Officer, **Iain Smith commented** "*We are pleased to have progressed these two key studies, which confirm that the Saturn Complex is particularly well placed to receive oil charge into reservoir systems that exhibit potential for high net-to-gross sandstone units and good indications for the presence of hydrocarbons. Additional QI screening studies are being progressed, as are revisions to Pancontinental's estimates of prospective resources and geological risking, targeting late July.*"

Please refer to Pancontinental's announcement to ASX of 18 March 2025 for details of the Company's current estimates of prospective resources and geological chances of success.

About PEL87

Petroleum Exploration Licence 87 (PEL 87) is located in the offshore Orange Basin, southern Namibia (refer Figure 1). The permit covers an area of 10,970 km^2 and is situated on-trend with a number of very significant hydrocarbon discoveries that have been made in recent times by Galp Energia, TotalEnergies, and Shell.

PEL 87 was awarded to a joint venture led by Pancontinental in early 2018 for up to 3 terms over 8 years (plus subsequent extensions) and may be converted to a Production Licence under pre-agreed terms.

The participants in the PEL 87 Joint Venture are as follows:

Pancontinental Orange Pty Ltd (Operator)	75%
Custos Investments (Pty) Ltd	15%
National Petroleum Corporation of Namibia (NAMCOR)	10%

END

This announcement is authorised for release by the Board of Pancontinental Energy NL.

PANCONTINENTAL ENERGY NL
Vesna Petrovic
Company Secretary and Executive Director

ASX I PCL

45 Ventnor Avenue
West Perth, WA 6005
T: + 61 8 6363 7090

pancon.com.au