



Geologische Dienst Nederland

The interpretation presented here is based on available public data and is subject to inherent uncertainties. Additional information (e.g. lithological descriptions, depositional environment) of lithostratigraphic units can be found on DINOloket Stratigraphic Nomenclature website by clicking the hyperlinks on each labelled formation or group name.

L2EBN2020CUOBR017 - L2EBN2020ASCAN018

Lines 17–18 run southwest–northeast from the Zeeland High towards the Peel-Maasbommel Complex, crossing a small portion of the Oosterhout Platform and the entire Roer Valley Graben (RVG). The RVG is bounded by the Feldbiss Fault Zone (Veldhoven Fault) to the west and the Peelrand Fault Zone to the east.

The part of the Zeeland High covered by Carboniferous strata is referred to as the Campine Block. It exhibits a relatively complete, tilted and faulted Limburg Group, unconformably overlain by the Upper Cretaceous Chalk Group. The absence of Triassic and Jurassic strata on this high, in contrast to their presence within the RVG, is attributed to significant uplift and erosion during the main Late Jurassic to Early Cretaceous rifting phases, prior to Late Cretaceous deposition.

The Upper Cretaceous Chalk Group is overlain by a thick sequence of the North Sea Supergroup. On the rift shoulders, the Chalk Group was deposited during and after the Campanian (Sub-Hercynian) tectonic inversion and is relatively thick.

The Carboniferous sequence is also present within the RVG, but it is deeply buried. Due to limited seismic resolution at these depths, reliable interpretation is not possible. Although the Permian–Triassic succession is not subdivided in this section, recent work by Cecchetti et al. (2024) has provided further differentiation of the Permo-Triassic interval along this line. In the RVG, the top of the Permo-Triassic appears as a high-reflectivity interval, interpreted as the heterogeneous Muschelkalk Formation.

Unlike the structural highs to the south and north, the RVG contains a thick Jurassic succession, unconformably overlain by a thin Chalk interval. Most of the Chalk Group was eroded during the Late Cretaceous (Sub-Hercynian) tectonic inversion, and the remaining thin succession represents post-inversion units such as the Maastricht and Houthem formations.

On the Peel-Maasbommel Complex, forming the eastern rift shoulder of the RVG, a similar syn-inversion Chalk Group sequence is present, although it is significantly thicker. This may indicate deposition within a larger depocentre located north of the RVG inversion axis.