

Supplementary material 4. Indicative 4D seismic response indicating a barrier to flow between production wells 15/20a-D7 and 15/20a-D10, consistent with the production behaviour of no direct interaction between the northern and southern Donan Field redevelopment development wells. (a) Top reservoir amplitude difference map between the 1993 and 2005 3D seismic surveys highlighting the impact of production during the BP phase of development from wells 15/20a-4 and 6. (b) Seismic cross-section through the lithology volume highlighting the location of the subcrop of a tighter layer intersected in the 15/20b-15 well, which is consistent with the location of the inferred barrier to flow.