

**Supplementary material 6.** Wireline log character in well 15/20a-18 across the Lower Balmoral Sandstone Unit. This well was drilled following several years of production from the Donan Field redevelopment. In the interval interpreted to be swept, Sw is considerably higher than calculated in the elevated Sw intervals. Additionally, the character of the logs is inconsistent with those recorded in the elevated Sw intervals (after Ings *et al.* 2015).