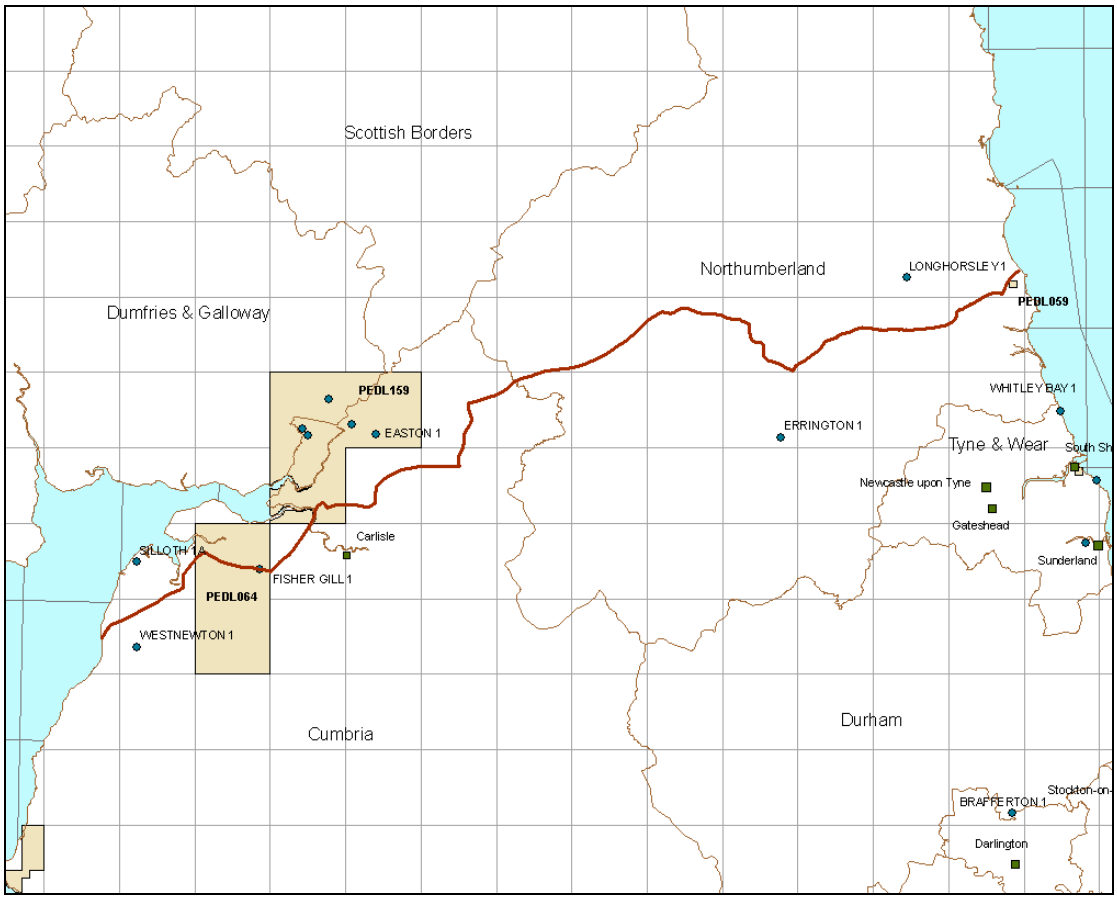
UKOGL-RG-002 - Solway (W) to Northumberland (E)



This profile begins in the Permo-Triassic Basin of Cumbria, showing the strong unconformity between the Permian basal sandstone and the underlying, mainly Carboniferous rocks of the Solway Basin. Unfortunately, the line does not tie any released wells directly, but the nearby wells of Westnewton 1 and Silloth 1A can be tied in easily to demonstrate the nature and thickness of the Permo-Triassic section.

Passing out of the Permo-Triassic cover to the northeast, the Easton 1 well gives a good indication of the nature of the very thick sequence of Lower Carboniferous Dinantian rocks that make up the major part of the Solway and Northumberland Basins. This Lower Carboniferous, and possibly also Upper Devonian, sequence appears to thin regionally to the east but continues uninterrupted over a large anticline in the area between the Pennines and the Cheviot Hills and on into Northumbria.

Further to the east, the seismic profile crosses the outcrop of the overlying Namurian sequence, whose base can be tied to well Longhorsley 1. The outcrop of the Westphalian coal measures sequence occurs close to the end of the line, near the coast of the North Sea, and the base can be tied in to the seismic data both from the surface geology and from the offsetting well Whitley Bay 1, although unfortunately there is no velocity survey here.