OESG

09—Triple well casing

Features

The UK's stringent regulations require onshore oil and gas wells to be built to a standard that prevents fluids and gases escaping. In part, this is achieved by lining wells with steel casing (tubes) from top to bottom. Where the well passes through groundwater near the surface, it is lined with three layers of casing all with cement in between.

Advantages

Triple well casings, and the cementing in between them, provide six separate barriers between the contents of the well and the outside world in the most vulnerable upper section where it passes through any near surface aquifer that might be present—even if it's not used for drinking water extraction.

Benefits

Lining wells with triple casing substantially lessens the chances of fluids or gases escaping the well to enter the surrounding environment, and so reduces the risk of pollution. Whilst one barrier might develop a problem, that can be investigated and fixed, it is very unlikely that all six steel and cement barriers would ever be compromised at the same time, meaning maximum groundwater protection.