



Sustained Casing Pressure

Sustained Casing Pressure (SCP) is excessive casing pressure in wells that persistently rebuilds after bleed-down. SCP is the result of gas migration through failed or degraded well barriers manifesting at the wellhead as annular pressures that cannot be effectively bled off.

SCP in any well means that well integrity has been compromised. Poor well integrity poses a number of serious health, safety, and environmental risks, ranging from contaminated groundwater to major blowout catastrophes.



Sustained Casing Pressure has been a key area of focus in the industry since early 2000 when regulators and operators started recognizing the magnitude of well integrity problems. In 2004, the US Minerals Management Service identified over 40% of the wells in the Gulf of Mexico as showing sustained high casing pressure (Oil & Gas Journal, 2004). The Oil and Gas Authority UK published in 2018 that well integrity accounted for 43% of the total production loss in the UK Continental Shelf.

The introduction and update of well integrity guidelines in the last decade, including (but not limited to) NORSOK-D010, ISO-16530 and API RP 90 Annular Casing Pressure Management has provided the industry with excellent guidance to keep wells safe and robust throughout their lifecycle.

New initiatives, such as Carbon Capture and Storage (CCS), stress the importance of well integrity more than ever. Existing wells (producing, suspended and previously abandoned) with known and unknown well integrity issues can create potential leak paths as CO₂ is being injected, potentially putting the project at serious risk, if field well integrity is not thoroughly assessed.

Know your wells. Own your wells.