Water control and oil increasing technology

AB-III featured by permeable continuous pack-off particles and ICD screens is used for water control and oil increase.

Innovation

Breaking through the limitation of packer on wellbore segment, the packer is replaced by continuous pack-off particles filled in outer space of ICD screen string.

- The continuous pack-off particles segment the whole production into more sub-flow units than the packer, thus, the water axial channeling is prevented, the efficiency of water control is much better.
- The continuous pack-off particles work better in the following situations, but the packer cannot.
  The annular space between common screen and wellbore, annular space between perforated casing and wellbore, the channeling of perforated casing, out-of-round oversized open hole etc.
- Easy return of continuous pack-off particles from wellbore and so does the screen string, while the packer cannot be returned.

Features

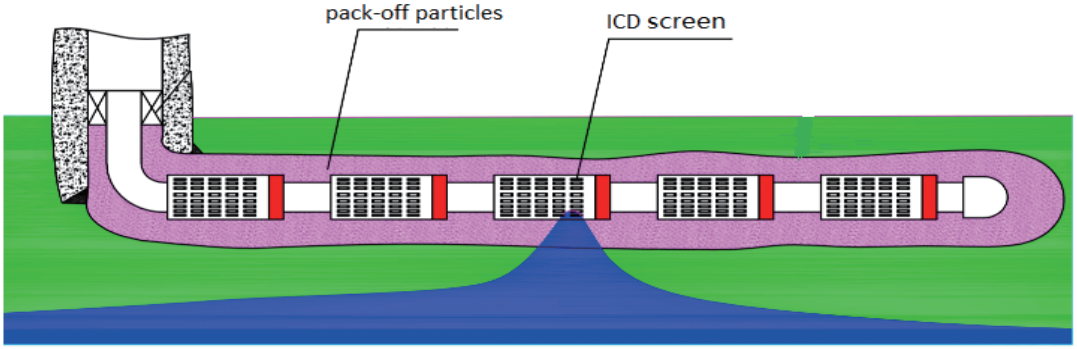
- Adaptive water control: no need to find WBT (water breakthrough), treating multi-WBT simultaneously, the later WBT(s) is (are) also under control.
- Applicable in complex situations: old well with common screen or perforated casing, well with channeling of perforated casing, out-of-round oversized open hole.
- In fractured-porous reservoir, double water control is seen in fissure and wellbore.

Achievements

- Innovative technology based on independent research and development.
- Exclusive owned technology globally.
- Acquisition of 7 international patents and 30 patents in China.

Performances

AB-III technology had been applied in more than 10 wells continuously in South China Sea since 2018 was proved successfully, which is being applied now in new wells in large numbers. AB-III technology efficiently controls the water and sand,prevents mud blockage simultaneously in sandstone reservoir. In fractured porous reservoir, AB-III technology not only controls water in wellbore but also controls the water in fissure, therefore, which improves efficiency remarkably.



Wellbore structure with AB-III completion technology