

Anton Gravel Packing Technology

Gravel packing is a common and effective sand control approach used to resolve the sand production issue of unconsolidated reservoirs or reservoirs that contain fine silty sand and high clay content. By eliminating sand production issue, the production for oil and gas wells can be enhanced. Precede Petroleum Technology Co., Ltd is a wholly owned subsidiary of Anton. It is a domestic pioneer in gravel packing technology and also has substantial operation experience. The company is specialized in developing sand control methods for oil and gas wells, on-site technical services and tools development. The company provides integrated service from products to on-site operation and has professional R&D and service teams. Anton is dedicated to develop innovative technologies and it is capable to implement world leading sand control and completion technologies such as "high-pressure gravel packing", "open hole packing for horizontal wells", "annulus packing for horizontal wells", and "steam injection thermal recovery integrated sand control technology".

Technical Principle

The gravel slurry is first delivered into the annulus of the well by the pump. During the packing process, gravel slurry that enters the oil formation and gravel inside the well form a barrier that blocks sand and maintain the maximum permeability of the packing zone. This technique effectively extends the sand control effective period and helps the well to achieve better production.

Application

- Vertical wells, directional wells, and horizontal wells
- Single formation or multiple formations production zone
- Formations with good homogeneity or similar properties
- Oil/water wells that have no leakage or slight leakage

Technical Advantages

- Sand control treatment: by squeezing and circulation of gravels into the oil formations and annulus, the sand control has high success rate and long effective period
- Enhanced production: by fracturing and unplugging the formations, the permeability of production zone increases and the production flow resistance decreases, causing improved production
- Lower the cost: it only takes one run for gravel packing to be done in the formation and annulus, which reduces the work hours and operation time

Achievement

- A self-developed technology that receives many patents
- World leading sand control design and service capability

Application Performance

Anton's gravel packing technology has been used for more than 5,000 wells worldwide and the clients from China, Sudan, and Columbia have given us good feedback due to the good performance of Anton's gravel packing technology.

