RMS pumptools

Completion Series

Dual Concentric / Multiple Zone

The RMSpumptools Dual Concentric/Multiple Zone is a dual ESP system using two independent ESP systems that separately and individually produce two production zones in the same well without mingling the fluids.

The Upper Zone is produced by the upper ESP which is configured with the RMSpumptools Dual Flow Y-Tool. The Lower ESP, which is encapsulated in the pressure-tight shroud (suspended off the bypass of the Upper ESP), pumps the lower zone. The tailpipe of the Shroud is fitted with a Seal Mandrel that engages into the PBR of a permanent packer, separating the two production zones.

Co-mingling of fluid is prevented by the use of a separate concentric tubing string (inside the main production string), creating a micro annulus. The concentric tubing is fitted with a Seal Mandrel that locates in the Seal Bore in the Dual Flow Y-Tool.

Application

Dual Zone ESP pumping utilising a single well bore, where anti co-mingling is required.

Advantage

A low cost solution to dual zone pumping, requiring no down-hole "intelligent" technology. Only one well required to produce two zones. No down-hole production measurement equipment is required because accurate measurement of production of each zone can be done at surface. Producing from two zones in one wellbore eliminates the need of drilling a second well.

