

Sand Control System

Series 5000 Thru-Tubing Frac Pack System

General

The TTS Series 5000 Thru-Tubing Frac Pack System utilizes a Retrievable Seal Bore Packer, (Model 5000); along with a perforated Frac Pack Extension which includes a closing sleeve and removable Frac Plug combination. The system allows for deployment in one trip via, coil tubing, jointed pipe, electric line or slickline. This system allows for the well to be frac packed thru tubing and still utilize a mechanical sealing and anchoring system. After deployed into the well and the Frac Pack or Gravel Pack applied, the well is then washed out with coil tubing if needed. The Frac Plug is then pulled simultaneously closing the Frac Sleeve. This can usually be done on slickline. The well is then put on production.

Application

- ♦ Installed as primary sand control system thru tubing
- ♦ Installed as primary sand control system in mono bores
- ♦ Installed as primary sand control system in casing
- ♦ Installed to repair existing failed sand control systems thru tubing

Features/Benefits

- ♦ Allows for the ability to frac pack or high rate gravel pack the well with a coil tubing or wireline deployed thru-tubing system. *Cost saving over other systems requiring a work over rig.*
- ♦ Employs use of mechanical sealing and anchoring device as opposed to most vent screen frac pack systems. *Eliminates the complexity and uncertainty of proper gravel pack proppant isolation and subsequent proppant flow back associated with typical vent screen frac pack systems.*
- ♦ System simplicity; contains no reciprocation crossover tools and workstring attachments. *Eliminates the chance of sticking crossover tools and other work sting related risk.*
- ♦ Frac pack or gravel pack slurry is pumped thru the production string as opposed to coil tubing or small workstring which limit pump rate when deployed thru tubing. *Allows for high rate pumping of frac pack or high rate gravel pack.*

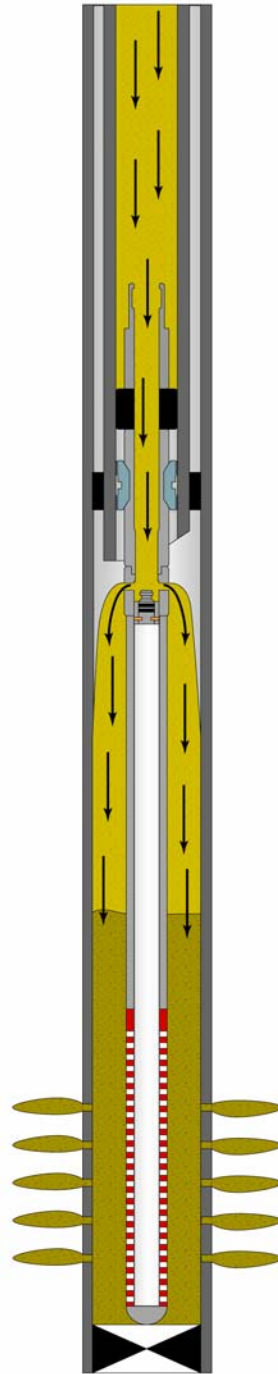


Frac Pack

Run-In



Frac Packing



Producing

