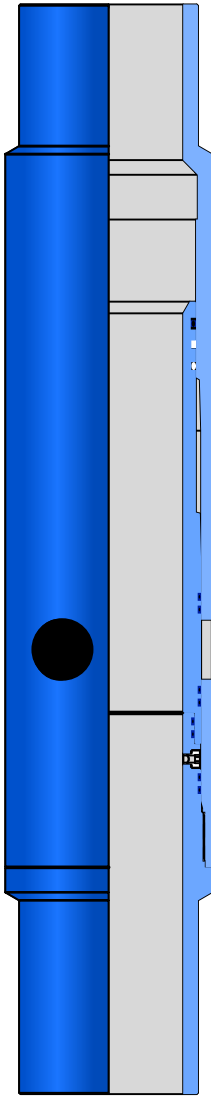


PetroQuip Toe Sub



The **PetroQuip Toe Sub** eliminates the need for Tubing Conveyed Perforating (TCP) toe prep by providing a simple and reliable hydraulically actuated injection path. The Toe Sub can be pressure tested multiple times below the activation pressure.

Features and Benefits

- Multiple low-pressure tests can be applied prior to opening
- Open upwards and held in open position by three means:
 - Snap ring
 - Hydraulic pressure
 - Morse taper
- Each toe valve configured to suit well application
- Large flow area
- Opening pressure not affected by well bore pressure
- Optional ball seat, which allows for DFIT to be performed
- Absolute pressure rating 22,000 psi

Casing / Liner Size (in)	OD (in)	ID (in)	OAL (in)	Flow Area (in)	Rupture Disk Increments (psi)	Material (KSI)	Tensile (lbs)
3-1/2	4.25	2.450	35.3	7	500	110	183,000
4-1/2	5.875	3.755	37.8	19		140	248,750
	5.5	3.250	37.5	16		125	285,000
5-1/2	7.25	4.015	38.4	24	140	459,500	
		4.775					
	6.875	4.270					387,500