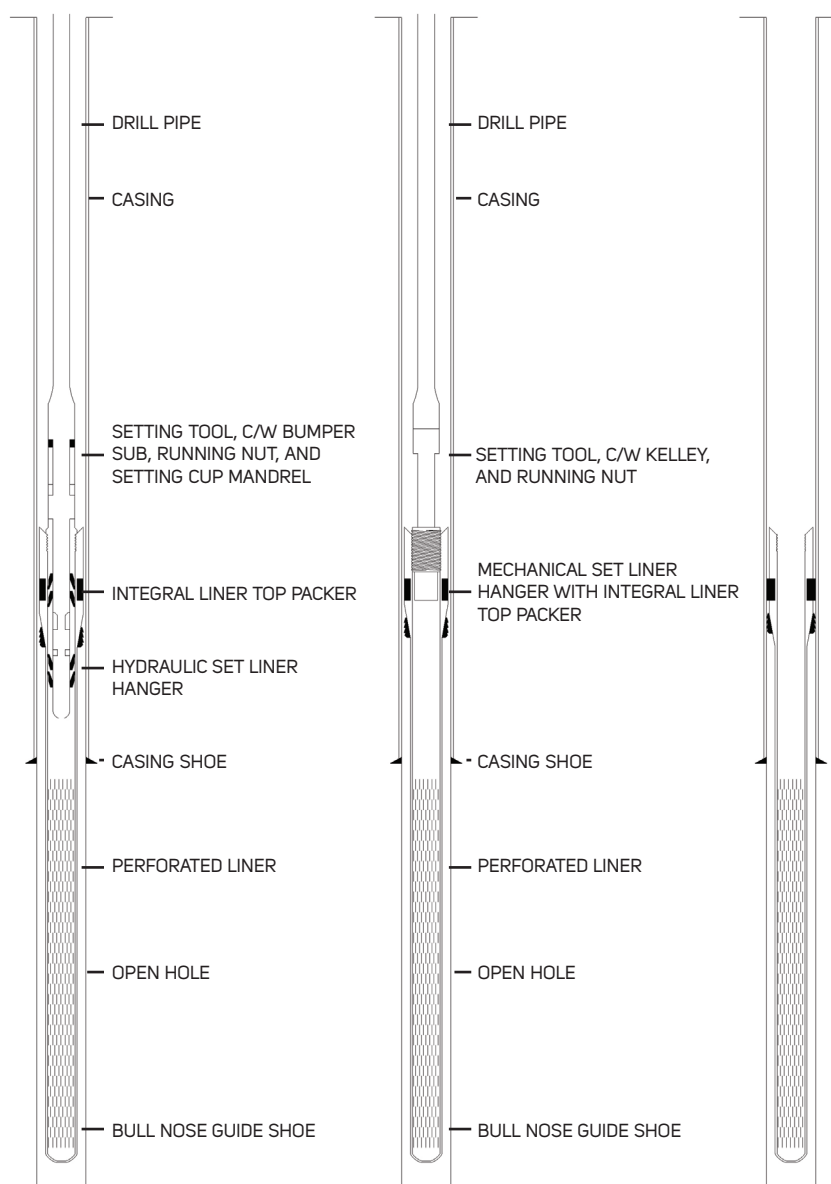


SLOTTED LINER ASSEMBLIES WITH LINER HANGER

At times it is necessary to hang a liner in tension. There are a couple of reasons for this. Either there is no bottom on which to set down and release the liner, or there is sufficient liner length (1,000 feet or more of liner) that might cause buckling or failure when set on bottom. Hanging a liner versus setting it on bottom will prevent liner buckling when setting liner top seal using reciprocating or beating down.

Liner hangers are generally run on the liner top and incorporate a packer seal element. Hold down slips can be incorporated, and various packer seal elements can be provided depending on downhole temperature, pressure, and the concentration of H₂S or CO₂.



**SLOTTED LINER ASSEMBLY WITH
HYDRAULIC SET LINER HANGER
AND SETTING TOOLS**

**SLOTTED LINER ASSEMBLY WITH
MECHANICAL SET LINER HANGER
AND SETTING TOOLS**

**LINER HANGER SET SETTING
TOOLS RELEASED AND PULLED
OUT OF HOLE**