TUBING HANGER SADDLE VALVE

ABSTRACT

A tubing hanger 10 incorporates a flow control valve that is ordinarily found in a horizontal christmas tree. A branch passage 16 forming a production fluid outlet has a mouth that intersects with a vertical production bore 12. A valve closure element in the form of a rotatable sleeve or saddle 14 is disposed in the bore 12 for co-operation with a seat 18 disposed in the branch passage 16. Rotation of the sleeve 12, e.g. by means of a shaft 28 extending through a crown plug 24, brings a hole 20 into or out of alignment with the seat 18 to control production fluid flow. In other embodiments, the sleeve 14 is axially movable.

Fig. 1