Abstract

OFFSHORE UNIVERSAL RISER SYSTEM

An offshore universal riser system. A riser system includes a valve module which selectively permits and prevents fluid flow through a flow passage extending longitudinally through a riser string. An anchoring device releasably secures the valve module in the flow passage. A method of constructing a riser system includes the steps of installing the valve module in the flow passage, and installing at least one annular seal module in the flow passage. The annular seal module is operative to prevent fluid flow through an annular space between the riser string and a tubular string positioned in the flow passage. Drilling methods include injecting relatively low density fluid compositions into the annular space, and selectively varying a restriction to flow through a subsea choke in a drilling fluid return line. The riser string, including housings for the various modules and external control systems, is dimensioned for installation through a rotary table.

Figure 19