

SUBSEA TREE WORKOVER CONTROL SYSTEM

ABSTRACT

An electrical and hydraulic configuration on a subsea tree that facilitates the use of an ROV control system to operate the tree during well installations, interventions, and workovers. An SCM at the tree is in communication with a fixed junction plate that receives a production umbilical during normal operation. The ROV can be deployed to disconnect and park the production umbilical during well installations, interventions, and workovers to prevent accidental operation of the SCM or tree. The junction plate is configured to connect with the ROV and thereby establish communication with the hydraulic lines of the SCM. The ROV may carry an umbilical from a vessel to provide electrical and hydraulic service to the SCM during well operations. In addition, the ROV has facilities to repressurize spent control fluid to thereby allow reuse of the control fluid by the SCM.

Figure 3