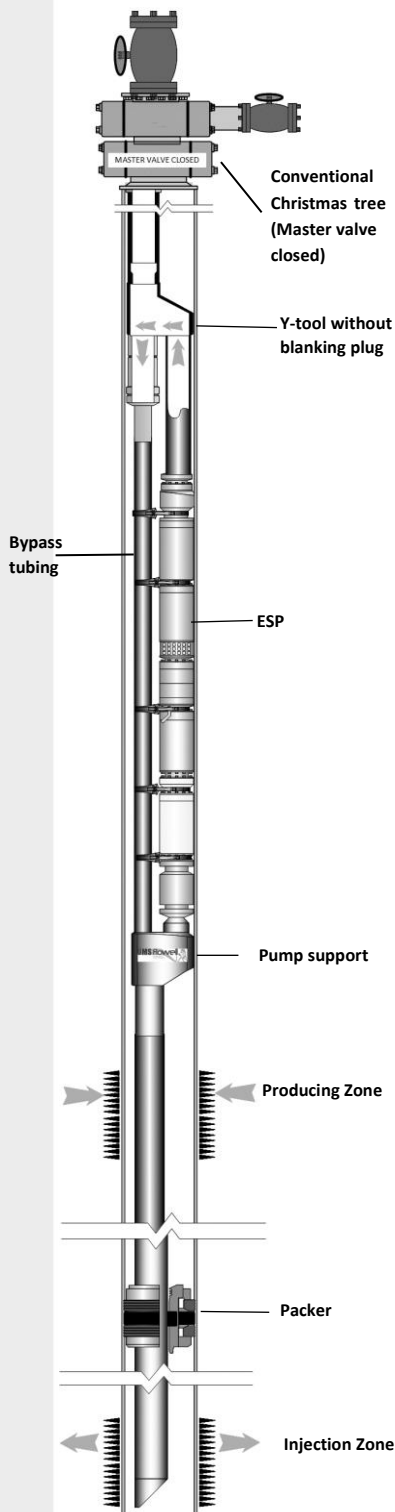


# Dump flood using an ESP to increase reservoir productivity



Water injection is a common method of increasing a depleting oil reservoir pressure to increase the reservoir productivity. Conventional water flood projects may not be economically viable. A low-cost method can be done with an existing producing well that has watered out, and install an electrical submersible pump (ESP) and produce water from the existing production zone and inject it into an injection zone.

UMS Flowell's Y-tool with pump support can be used with an ESP for dump flood applications as an alternative to inverted ESPs using conventional ESPs. The system is run without a blanking plug installed in the bypass nipple. The production zone and injection zone are isolated with a packer and the master valve on the Christmas tree is closed. When the ESP is started the water from the production zone is produced through the bypass tubing into the injection zone.

The system uses conventional ESP logging bypass equipment. The installation load is limited to the 20 tonnes safe working load of the bypass tubing safety clamp. Applications that have a higher installation load due to heavy tailpipe can be accommodated on a case by case basis. Likewise, the bypass tubing size and strength can be reviewed for special applications.

More information on the UMS Flowell ESP logging bypass equipment can be found in our datasheets.