

SUBSEA WELL SEPARATION AND REINJECTION SYSTEM

Abstract:

A subsea well assembly has a string of casing with perforations leading to a producing zone and perforations leading to an injection zone. A string of production tubing extends into the casing in communication with the producing formation. A barrier separates the interior of the tubing from the injection zone formation. A subsea Christmas tree is located at the upper end of the well. A subsea separator is connected to a production outlet of the tree for separating waste fluid from the well fluid. A subsea injection pump pumps waste fluid from the separator back to the tree and into the injection formation.

Figure 1