

Title (en)
DOWNHOLE SYSTEM FOR REMEDIAL TREATMENT

Title (de)
BOHRLOCHSYSTEM ZUR SCHADENSBEHEBENDEN BEHANDLUNG

Title (fr)
SYSTÈME DE FOND DE TROU POUR TRAITEMENT DE RÉPARATION

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Application
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Abstract (en)
The present invention relates to a downhole system for remedial treatment of a well in a hydro-carbon reservoir having insufficient flow velocity and thereby accumulating water in the toe of the well. The downhole system comprises a production metal casing having a first inner diameter and a first production zone, and a velocity metal string having a second inner diameter smaller than the first inner diameter and being arranged inside the production metal casing to reduce the flow area and increase the flow velocity of the fluid flowing in the well. The velocity metal string comprises a first annular barrier comprising a tubular metal part for mounting as part of the velocity metal string, the tubular metal part having an outer face, an expandable metal sleeve surrounding the tubular metal part and having an inner face facing the tubular metal part and an outer face facing the production metal casing, each end of the expandable metal sleeve being connected with the tubular metal part, and an annular space between the inner face of the expandable metal sleeve and the tubular metal part, the expandable metal sleeve being configured to expand by expanding the annular space. The first annular barrier is expanded so that the expandable metal sleeve abuts the production metal casing, dividing an annulus between the production metal casing and the velocity metal string into a first annulus section and a second annulus section, the first annulus section being arranged closer to a top of the well than the second annulus section. Furthermore, the invention relates to a downhole gas lift method for remedial treatment of a well in a hydro-carbon reservoir having insufficient flow velocity.

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