排液采气工艺选择与参数优化

摘要

Q组气藏经过十几年来的勘探与开发,随着采收率的提高,但是Q组气藏的平均地层压力已经小于露点压力,大部分气井也进入了自发注水阶段,甚至出现了淹水和停工现象,气井产能严重下降,形势严峻,

在开展了Q组气藏积液判断研究,并在结合了Q组气藏开发工艺技术特点之后,采用了下井管柱工艺简单和有较长的免修周期的气举工艺,充分利用了气田自有的高压气体,有效延长了气井的开采寿命,并以B5井为例,进行了气举优化设计与油管壁打孔试验,使气井生产稳定,并取得了较好的增产效果。

关键词:凝析气藏;气井出水;排液采气工艺;气举



Abstract

After more than ten years of exploration and development, the average formation pressure of Q gas reservoir has been less than the dew point pressure, and most of the gas wells have entered the stage of spontaneous water injection, and even the phenomenon of flooding and shutdown has occurred.

Q gas reservoir is judged and combined with the characteristics of Q gas reservoir development technology, and the gas lift process with simple down-hole tube column technology and long no-repair period is adopted to make full use of the gas field's own large pressure gas, effectively prolongs the gas well's mining life, and takes B5 well as an example to carry out gas lift optimization design and design. The drilling test of oil pipe wall makes the production of gas well stable, and has achieved effect of increasing production.

Key words:Condensate gas reservoir; Outlet of gas well; Drainage gas extraction process; Gas lift

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