

عنوان مقاله:

Feasibility Study of Extended Reach Well Drilling Technology in Iranian Reservoirs

محل انتشار:

نخستین کنفرانس بین المللی نفت، گاز و پتروشیمی با رویکرد توسعه پایدار (ارتباط دانشگاه با صنعت) (سال: 1393)

تعداد صفحات اصل مقاله: 13

نویسندگان:

Mohammad Hosein Zareenejad - *Department of Petroleum Engineering, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran*

Mohammad Hajzadeh - *Department of Petroleum Engineering, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran*

,Vahid Salimi - *Department of Petroleum Engineering, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran*

خلاصه مقاله:

Over the last years the drilling of Extended Reach Wells (ERW) has become almost common practice in the petroleum industry. Extended Reach Drilling (ERD) is increasingly important because it offers the potential of platform size (location footprint) reduction, access to restricted areas and greater utilization of existing facilities. These benefits result in lower cost. This is while ERD imposes some additional technical problems. Torque and drag, drill string design, drilling fluid design, hole cleaning, casing consideration, directional drilling optimization, rig sizing and wellbore stability are critical parameters to successfully drill an ERW. In this paper reservoirs that can be the best candidates for ERD are introduced and then suitable Iranian candidates for this method are presented. Finally wellbore stability as an important concern is modeled. A well in Mansuri oilfield is modeled using FLAC software to calculate the critical mud weight below which the wellbore will collapse. Results show that the well is a good candidate for ERD and critical mud weight for drilling was detected 8.45 ppg. It was also shown that Gachsaran (shallow reservoir), Ahvaz and Mansuri (reservoirs with significant vertical permeability), Rage-Sefid (successfully drilled horizontally) and Bangestan (dense and thin reservoir) are some Iranian reservoirs which have a good potential of being drilled using ERD technique

کلمات کلیدی:

Extended Reach Well, Extended Reach Drilling, Wellbore Stability, drilling optimization

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/383605>

