

استهلال

قال الله تعالى:

{اللَّهُ نُورُ السَّمَاوَاتِ وَالأَرْضِ مَثَلُ نُورِهِ كَمِشْكَاةٍ فِيهَا مِصْبَاحُ الْمِصْبَاحُ فِي زُجَاجَةٍ النُّ جَاجَةُ كَأَنَّهَا كَوْكَبُ دُرِّيٌّ يُوقَدُ مِن شَجَرَةٍ مُّبَارَكَةٍ زَيْتُونَةٍ لِّاشَرْ قِيَّةٍ وَلاَغَرْبِيَّةٍ يَكَاد الزُّجَاجَةُ كَأَنَّهَا كُوكَبُ دُرِيَّ يُوكِ عَلَى نُورٍ يَهْدِي اللَّهُ لِنُورِهِ مَن يَشَاء وَيَضْرِبُ وَزَيْتُهَا يُضِيءُولُو اللَّهُ الأَمْثَالَ لِلنَّاسِ وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ {35}

سورة النورالآية (35)



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Abstract

Enhanced oil Recovery methods had been used around the world for enhancing oil production and getting higher recovery factor from oil reserves. Cyclic Steam Stimulation is one of the most wide used methods which means injection of high temperature steam into the production well, then shut in the well for soaking phase, then the same well will be used as production well.

The most effective parameters in cyclic steam stimulation applications are injection parameters, soaking time and production period.

Injection parameter – Steam quality and Steam temperature – had been studied versus base case In DQ field , in two different cases versus base case , results shown that case -1 with total consumed 2947.32 BBL fuel , with more economic expenses is the optimum case to get high productivity and reduce oil consumption compared with the base case and case-2, which consumed 2267.17 , 3400.76 BBL fuel

<u>التجريد</u>

إستخدمت طرق الاستخلاص المحسن للنفط عالمياً للحصول على معدلات انتاج عالية ومن ضمن هذه الوسائل تم استخدام الحقن الدوري بالبخار، وهو حقن البئر بالبخار ثم اغلاقها لفترة انتظار ومن ثم يتم استخدامها للإنتاج مرة أخرى، وهنالك العديد من العوامل المؤثرة على الحقن الدوري للبخار منها متغيرات الحقن وطول فترة الإنتظار بين طوري الحقن والإنتاج.

خواص الحقن - جودة البخار ودرجة حرارة البخار - تمت دراستها في مقابل الحالة الأساسية في الحقل DQ ، في حالتين مختلفتين مقابل الحالة الاساسية ، والنتائج أظهرت أن الحالة -1 مع المزيد من النفقات الاقتصادية هي الحالة المثلى للحصول على إنتاجية عالية وتقليل استهلاك النفط مقارنة مع الحالة الاساسية والحالة -2. بالنسبة للحالة الأولى كان استهلاك الوقود 2947.32 وبالنسبة للحالة الثانية والحالة الرئيسية كان استهلاك الوقود 3400.76 برميل

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