

selection the best artificial lift method in wells of south-west field in iran

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Introduction. The decline in production of a well during the time is natural and common phenomena and usually happens in the wells of a field and considering that the amount of production from the wells of a field is an important matter from the economic point of view. Therefore, the amount of production should always be controlled.

Aim. One of the Well-centered approaches that use in order to maintain or increase production from these types of the wells is artificial lift methods. These methods are divided into the two general types: gas lift methods and pumping methods that these general methods of approaches also include some other methods.

Materials and methods. For as much as each of the artificial lift methods are applicable in a different condition and they are suitable in a special situation, therefore, it is important to determine the most appropriate method for the conditions of a specified well.

Results. In this study, six wells from the field were investigated to study the impact of artificial lift methods on them and since only two ESP and gas lift methods are applicable on these wells so just the effect of these two methods has been investigated, while both of these methods had a good improvement in the production of wells, due to increased production and parameters such as rate of gas injection, a method that is more suitable for each one is selected.

Conclusion. The electrical submersible method for wells A and C, gas lift method for wells B and E and both of the methods for well D were selected and for well F, it seems that both of the methods are not suitable. it seems the ESP method has better performance than gas lift in wells with lower production rates of gas and oil and vice versa.

Key words. Artificial Lift, Well-Centered, Gas Lift, Pump Method

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