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Title: **Artificial Lift Electric Submersible Pump Design Considerations for Oilfield Operations in Iraq**

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Abstract

Oil & Gas operating companies in Project Rounds 1 and 2 committed to a sum total plateau production of 11.1 million b/d oil over ten Iraqi oilfields. This compared to current production of 1.5 million b/d at time of tender.

Of this amount, sum total production commitments for Project Round 1(Rumaila, West Qurna 1, Zubair oilfields) comprise 6.4 million b/d from a current production of 1.5 million b/d. The remaining seven oilfields had under 60k b/d production at time of tender.

Achieving this approximately 725 % increase in overall Iraqi oilfield production requires significant investment in secondary recovery technologies and advanced artificial lift operational processes. Typical methods deployed in the industry are a choice of either gas lift, or the application of electric submersible pumps, rod pumps, jet pumps, or progressive cavity pumps.

By far, the secondary recovery artificial lift equipment expected to be applied most in Iraqi oilfields is the electric submersible pump (ESP). This paper details many of the ESP design criteria and considerations necessary to achieve operational goals and optimize reservoir production.