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## ASPHALTENE- WAX DEPOSITION CONTROL IN VANKOR OIL AND GAS FIELD CONDITIONS

### Background

Vankor Field is relatively young. Oil is produced by flow and mechanized methods using electric centrifugal pumping units. Main complications in oil production are forming and accumulation of asphaltene-wax deposits, which result in lower performance of the system, reduced overhaul period during well operation, and lower efficiency of the pumping units. The paper reviews methods of asphaltene-wax deposition control with account for oil production methods used in the field.

### Aims and Objectives

To compare various methods of removing asphaltene-wax deposits from the tubing and submersible equipment. To substantiate the effectiveness of using well heating units. To estimate the effectiveness and profitability of oil heating units with a heat tracer as the main component that ensures the unit's reliability and functions as a heating element distributed along the length of the well. The released heat maintains the temperature in the bore higher than the temperature of paraffinic hydrate crystallization, thereby preventing the deposition of solid fractions and their accumulation on the tubing walls.

### Results

The analysis of the methods of asphaltene-wax deposition control in Vankor Field, presented in the paper, demonstrated the effectiveness of using oil heating units.

**Key words:** oil production, complications in production, asphaltene-wax deposits

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