

**Oil formation within the Astrakhan uplift (5900 m)
as a result of a dissolving of asphalt tars
in $\text{CO}_2 + \text{H}_2\text{O} + \text{CH}_4$ mixture.**

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The author has revealed the possibility of secondary heavy oils generation ($d = 0,817 \text{ g/sm}^3$, well 2 Volodarskaya, 5961 m, the Astrakhan uplift, the South-Western part of the Precaspian depression) based on a dissolving of a great part of asphalt tars (traces of ancient hydrocarbon fields) in $\text{CO}_2 + \text{H}_2\text{O} + \text{CH}_4$ mixture in $t^\circ = 139^\circ\text{C}$.

There are originated conditions for CO_2 of high temperature genesis within the Astrakhan uplift not only but in Karakul-Smushkovsky dislocation zone (20 - 97%). Hydrocarbonatenatrium waters distributed within the Upper Devonian-Lower Carboniferous carbonate deposits are a result of water vapors condensation. The Upper Devonian-Lower Carboniferous carbonate deposits are characterized as rich gas-producing rocks on sorbet gases characteristics (hydrocarbons content - more then $100 \text{ sm}^3/\text{kg}$, $\text{CH}_4 = 98 - 100\%$). With high t° and P hydrocarbons dissolve in CH_4 (partly), better - in CO_2 , but the best of all - in $\text{CO}_2 + \text{H}_2\text{O}$ mixture. So in high depths of the south of the Precaspian depression there are good conditions for dissolving of traces of ancient hydrocarbon fields in $\text{CO}_2 + \text{H}_2\text{O} + \text{CH}_4$ mixture.