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SOME ASPECTS OF GAS BLOWOUT ELIMINATION IN THE FIELDS OF FAR NORTH

Background
Foreign and domestic practice of the gas blowout elimination shows that, firstly, it is necessary to extinguish the flame of burning fountain on the wellhead and only then to proceed to the elimination of the blowout. In the oil fields of the Far North, this practice does not work, because after the fire extinction the oil spills on the surface might re-ignite spontaneously. The unpredictability of the re-ignition complicates the process of rescue and recovery operations.

Aims and Objectives
Ensuring fire and blowout safety during well construction and operation.

Methods
The study of the causes of gas shows, the development of an open gas blowout and fire.

Results
1. Gas blowout elimination practice allowed classifying the fountains as: gas, gas-oil, oil, gas-water, gas-water-oil, with access to the wellhead or without it, with the flame or without it, continuous or pulsation fountains, mist or flat stray, small, medium, big fountains.
2. On the basis of fountain’s type and power the best technology of blowout elimination is selected: close the wellhead and then abandon the well, install the packer into the tubing, pump down the dense liquid, transfer the gas to the lateral wells, produce the gas through the lateral wells from the emergency well, water pumping, downhole explosion.
3. Log and fountain grow analysis helps to find the most suitable elimination technology from the existing or to find the new solution.
4. Despite the significant experience in blowout elimination there are still some non-solved problems, such as: how to remove the wellhead safely, especially in presence of non-common wellhead elements or unpredictable fountain behavior or on the offshore platforms.

Conclusion
Despite the success of the existing rescue and recovery operations, there are still some methodological issues, such as safe disposal of burning fountain with minimal time and financial costs.

Key words: oil and gas well, gas blowout, fire, elimination, field, Far North

References
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