Features and methodological aspects of well logging for natural bitumen

Petrov S., Borisov A., Mukhametshin R., Borovskiy M. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The article proposed to use the cross-well tomography to improve the efficiency of the bitumen deposits development and to obtain reliable information about the features of the geological structure and, consequently, for the optimal choice of sites for well testing and operations. Also proposed to use well logging techniques for investigating of the Permian hydrocarbons deposits in the deep wells. We consider the complex of well logs applied to the specific features of these wells. Noted that the design used in the Permian deposits has a critical diameter (0.4 m) for well logging and it is recommended to drill the first part of the well with a smaller diameter (not exceed 215.9 mm). More intensive introduction of "new" well logs, tested and successfully applied in the study of traditional oils (gamma spectrometry, C / O logging, VIKIZ, dielectric scanner and others) is needed.