GAS COMPOSITION OF FLUID INCLUSIONS IN THE SEREGOVO AND KOCHMES SALTS

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In spite of the long period of exploration of Seregovo salt dome and almost twenty years passed since discovery of Kochmes evaporite series, a number of questions remain to be answered concerning the history, conditions of formation and transformation of the salt rocks. The object of our research was composition and amount of gases released from halite at heating. Pyrochromatographic analysis was used for this purpose.Nitrogen, carbon dioxide, water, methane and light hydrocarbons were generally identified in the gas mixture. The high content of carbon dioxide and the lower contents of nitrogen and methane in the gas mixture indicate that these are the typical gases for the salt basin which has undergone significant epigenetic alteration. The low contents of water are due to opening of inclusions and coarse-grain recrystallisation of halite. The share of hydrocarbons in the gas mixture is 3 % on the average. High contents of pentane (up to 6%) are characteristic for a part of samples from Kochmes deposit. On the whole, compared to Seregovo salt dome, the hydrocarbon component of Kochmes deposit is distinguished by lower methane contents and essentially represented by heavy hydrocarbons.The obtained data on gas components in the Kochmes salt indicate good prospects for finding hydrocarbons in subsalt deposits of the Kosiyu-Rogovskaya depression.