

ENGINEERING GEOLOGY RELATED TO MAIN-GAS-PIPES ON EXAMPLE OF PRE-URAL

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The Main-gas-pipes that are lying from Siberia to Europe cross the Ural and Pre-Ural karstic mountain-masses for the length of 650km. Uzhgorod corridor has 6 gas-pipes with diameter of 1400mm. We distinguish the areas of the carbonate, sulphate and salt karst. The break-down took place on the new gas-pipe Center-2 on the February 1995 at the watershed of Iren and Kungurka rivers. The deformations of the gas-pipe were caused by the hydrogeological activity in sulphate rocks. There was carried out the complex of engineering geologic and hydrogeologic investigations including geophysical and remote hydrology-hydrogeological methods. We used boring, mine working and experimentation. We have the principal aim - creation the system of monitoring on the bare sulphate karst area. We project this system and the measures for preventing the gas-pipes deformations. The maximum engineering geological and hydrogeological activity takes place in the transitional hydrogeodynamic zone, acc. to G.A. Maksimovich, 1964, 1969. The stress of the pipes metal exceeds 33kgs/mm² on the separate points. The ways to prevent negative situations are worked off. This work is partially supported by grant of the Russia Education Ministry.