

# HYDROGEOCHEMISTRY OF THE WESTERN FLANK OF KUNTOMINTAR VOLCANO (SHIASHKOTAN ISLAND, THE KURILE ISLANDS)

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Based on hydrogeochemical data obtained during the 2011 field works, various types of natural waters (including fumarole gas condensates) from the western flank of Kuntomintar Volcano have been characterized for the first time. Cold and thermal mineralized acidic waters corresponding to the sulfate type with heterogeneous cation composition are distributed within the Zapadnaya kettle-caldera. Fumarole gas condensate belongs to the Ca-Cl type, with high content of borum. Chemical composition of natural waters is formed due to the interaction between meteoric waters and hydrothermally altered rocks. Gasses from Kuntomintar Volcano are of magmatic origin: their final composition has been formed as the result of fluid ascent to the surface and essential dilution by meteoric waters under near-surface conditions.

*Keywords: underground waters, volcano, gas, condensate, chemical compositions.*